AWARD/CONTRACT	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	RATING	PAGE OF PAGES 1 | 504

2. CONTRACT (Proc. Inst. Ident.) NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQUEST/PROJECT NO.
EP-W-16-015	See Block 20C	

5. ISSUED BY	CODE	6. ADMINISTERED BY (If other than Item 5)	CODE
HPOD US Environmental Protection Agency William Jefferson Clinton Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3803R Washington DC 20460	HPOD		

7. NAME AND ADDRESS OF CONTRACTOR (No., Street, City, Country, State and ZIP Code)	8. DELIVERY	9. DISCOUNT FOR PROMPT PAYMENT
AMEC ENVIRONMENT & INFRASTRUCTURE, INC. Attn: LISA DWYER AMEC FOSTER WHEELER ENVIRONMENT & I 751 ARBOR WAY, STE 180 (b)(4) BLUE BELL PA 194221960	☐ FOB ORIGIN ☒ OTHER (See below)	

CODE 038086125	FACILITY CODE	10. SUBMIT INVOICES (4 copies unless otherwise specified) TO THE ADDRESS SHOWN IN	ITEM

11. SHIP TO/MARK FOR	CODE	12. PAYMENT WILL BE MADE BY	CODE
		RTP Finance Center US Environmental Protection Agency RTP-Finance Center (AA216-01) 109 TW Alexander Drive www2.epa.gov/financial/contracts Durham NC 27711	RTP

13. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION:	14. ACCOUNTING AND APPROPRIATION DATA
☐ 10 U.S.C. 2304 (c) ( ) ☒ 41 U.S.C. 253 (c) (0)	See Schedule

15A. ITEM NO	15B. SUPPLIES/SERVICES	15C. QUANTITY	15D. UNIT	15E. UNIT PRICE	15F. AMOUNT
	Continued				

15G. TOTAL AMOUNT OF CONTRACT ▶ $29,123,740.00

16. TABLE OF CONTENTS

(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)
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	A	SOLICITATION/CONTRACT FORM		X	I	CONTRACT CLAUSES	24-30
X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	5-8			PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.	
X	C	DESCRIPTION/SPECS./WORK STATEMENT	9	X	J	LIST OF ATTACHMENTS	31
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X	E	INSPECTION AND ACCEPTANCE	11-12	X	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	32-41
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CONTRACTING OFFICER WILL COMPLETE ITEM 17 (SEALED-BID OR NEGOTIATED PROCUREMENT) OR 18 (SEALED-BID PROCUREMENT) AS APPLICABLE

17. ☒ CONTRACTOR' S NEGOTIATED AGREEMENT (*Contractor is required to sign this document and return* _____ *copies to issuing office.*) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. *(Attachments are listed herein.)*

18. ☐ SEALED-BID AWARD (*Contractor is not required to sign this document.*) Your bid on Solicitation Number _____, including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your bid, and (b) this award/contract. No further contractual document is necessary. (Block 18 should be checked only when awarding a sealed-bid contract.)

19A. NAME AND TITLE OF SIGNER (Type or print)	20A. NAME OF CONTRACTING OFFICER
	Robert A. Gray

19B. NAME OF CONTRACTOR	19C. DATE SIGNED	20B. UNITED STATES OF AMERICA	20C. DATE SIGNED
BY _____ *(Signature of person authorized to sign)*		BY _____ ELECTRONIC SIGNATURE *(Signature of the Contracting Officer)*	06/08/2016

NAME OF OFFEROR OR CONTRACTOR

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	DUNS Number: 038086125 IGF::OT::IGF Title: Operation of the Clean Air Status and Trends Network (CASTNET) The overall minimum for this contract is $250,000.00 The minimum is guaranteed. FOB: Destination Max Expire Date: 07/08/2021 FOB: Destination Period of Performance: 07/09/2016 to 07/08/2021				
0001	Operation of the Clean Air Status and Trends Network (CASTNET) Indefinite-Delivery Indefinite-Quantity (IDIQ) Contract Hybrid With Time-and-Materials (T&M) Task Orders (Single Award) Contract Base Period (Year 1) July 9, 2016 - July 8, 2017 Pre-Priced Ceiling Price Obligated Amount: $0.00				5,624,119.00
0002	Operation of the Clean Air Status and Trends Network (CASTNET) Indefinite-Delivery Indefinite-Quantity (IDIQ) Contract Hybrid With Time-and-Materials (T&M) Task Orders (Single Award) Contract Option Period 1 (Year 2) July 9, 2017 - July 8, 2018 (Option Line Item) 07/09/2017				5,708,760.00
0003	Operation of the Clean Air Status and Trends Network (CASTNET) Indefinite-Delivery Indefinite-Quantity (IDIQ) Contract Hybrid With Time-and-Materials (T&M) Task Orders (Single Award) Contract Option Period 2 (Year 3) July 9, 2018 - July 8, 2019 (Option Line Item) 07/09/2018				5,792,345.00
0004	Operation of the Clean Air Status and Trends Network (CASTNET) Indefinite-Delivery Indefinite-Quantity (IDIQ) Contract Hybrid With Time-and-Materials (T&M) Task Orders (Single Award) Continued ...				5,913,340.00

NAME OF OFFEROR OR CONTRACTOR

AMEC ENVIRONMENT & INFRASTRUCTURE, INC.

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Contract Option Period 3 (Year 4) July 9, 2019 - July 8, 2020 (Option Line Item) 07/09/2019				
0005	Operation of the Clean Air Status and Trends Network (CASTNET) Indefinite-Delivery Indefinite-Quantity (IDIQ) Contract Hybrid With Time-and-Materials (T&M) Task Orders (Single Award) Contract Option Period 4 (Year 5) July 9, 2020 - July 8, 2021 (Option Line Item) 07/09/2020 The obligated amount of award: $0.00. The total for this award is shown in box 15G.				6,085,176.00

SECTION B - Supplies or Services/Prices

B-1 Clauses

B-1 EPAAR 1552.216-73 FIXED RATES FOR SERVICES-INDEFINITE DELIVERY/INDEFINITE QUANTITY CONTRACT. (APR 1984)

The following fixed rates shall apply for payment purposes for the duration of the contract.

Base year rates:

Labor Categories—fixed rates	Fixed Hourly Rate
(b)(4)	(b)(4)

Option year 1 rates:

Labor Categories—fixed rates	Fixed Hourly Rate
(b)(4)	(b)(4)

(b)(4)	(b)(4)

Option year 2 rates:

Labor Categories—fixed rates	Fixed Hourly Rate
(b)(4)	(b)(4)

Option year 3 rates:

Labor Categories—fixed rates	Fixed Hourly Rate
(b)(4)	(b)(4)

(b)(4)	(b)(4)

Option year 4 rates:

Labor Categories—fixed rates	Fixed Hourly Rate
(b)(4)	(b)(4)

The rate, or rates, set forth above cover all expenses, including report preparation, salaries, overhead, general and administrative expenses, and profit.

The Contractor shall voucher for only the time of the personnel whose services are applied directly to the work called for in individual Delivery Orders and accepted by the EPA Project Officer. The Government shall pay the Contractor for the life of a delivery order at rates in effect when the delivery order was issued, even if performance under the delivery order crosses into another period. The Contractor shall maintain time and labor distribution records for all employees who work under the contract. These records must document time worked and work performed by each individual on all Delivery Orders.

This is a single award indefinite-delivery indefinite-quantity (IDIQ) task order contract with fixed labor rates for services. Work to be performed under this contract will be ordered through task orders placed pursuant to the ordering procedures described in the contract. All task orders placed under this contract will be within the scope of the contract as described in the tasks in the Statement of Work (SOW) (see Attachment 1).

(End of clause)

B-2 Local Clauses EPA-B-16-101 MINIMUM AND MAXIMUM AMOUNTS

During the period specified in F-2, the Government shall place orders totaling a minimum of $250,000 (applicable to the contract base period only). The amount of all orders shall not exceed TBD at time of award.

Item #	Period of performance	Minimum Guarantee	Maximum Contract Ceiling Price
0001	Contract Base Period (Year 1)	$250,000	$5,624,119
0002	Contract Base Period (Option 1)	$0	$5,708,760
0003	Contract Base Period (Option 2)	$0	$5,792,345
0004	Contract Base Period (Option 3)	$0	$5,913,340
0005	Contract Base Period (Option 4)	$0	$6,085,176

B-3 Local Clauses EPA-B-31-101 OTHER DIRECT COSTS

For the categories listed in the table in this clause, Other Direct Costs in excess of those listed in the table in this clause are not allowable as a charge to this contract without the prior written approval of the Contracting Officer:

Materials are defined in FAR 52.232-7 Payments Under Time-and-Materials and Labor Hour Contracts and FAR 16.601 Time-and-materials contracts (a).

Material handling costs: When included as part of material costs, material handling costs shall include only costs clearly excluded from the fixed labor rate (see Fixed Rates for Services—Indefinite Delivery/Indefinite Quantity Contract (EPAAR 1552.216-73) (APR 1984) under Section B). Material handling costs may include all appropriate indirect costs allocated to direct materials in accordance with the contractor's usual accounting procedures consistent with Part 31.

The Contractor shall voucher for only the materials (after applying any applicable adjustments such as rebates, refunds, credits, etc.) that are applied directly to the work called for in individual task orders and accepted by the EPA COR. The Government shall pay the Contractor for the life of a task order at rates in effect when the task order was issued, even if performance under the task order crosses into another period (including time extensions and exercising of option periods under the task order). The Contractor shall maintain records for all material costs under the contract by task orders.

The Contractor shall not exceed the following not to exceed (NTE) ceiling amounts without prior authorization by the Contracting Officer by unilateral modification of this clause:

Category of Materials	**NTE Ceiling Amount**
Subcontracts for supplies and incidental services for which there is not a labor category specified	$5,866,581
Equipment	$981,263
Utilities/Land Leases/Telemetry	$905,000
Travel	$568,464
Shipping	$1,285,077
Laboratory Analysis	$3,415,282
Supplies	$400,000
Total (Other than Direct costs) ODCs	**$13,421,667**

(End of clause)

SECTION C - Description/Specifications

C-1 Clauses

C-1 Local Clauses EPA-C-10-101 STATEMENT OF WORK/PERFORMANCE WORK STATEMENT/SPECIFICATIONS

The Contractor shall furnish the necessary personnel, material, equipment, services, and facilities (except as otherwise specified), to perform the Statement of Work (SOW) included in Attachment 1. Work will be ordered against the subject SOW through Contracting Officer issuance of task orders as detailed in Attachment 12 Ordering Instructions.

SECTION D - Packaging and Marking

D-1 Clauses

SECTION E - Inspection and Acceptance

E-1 Clauses

E-1 FAR 52.246-6 INSPECTION - TIME-AND-MATERIAL AND LABOR-HOUR. (MAY 2001)

E-2 FAR 52.246-11 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (GOVERNMENT SPECIFICATION) (FEB 1999)

The Contractor shall comply with the higher-level quality standard selected below.

(X)	Title	Number	Date	Tailoring
X	Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs	ANSI/ASQC E4	1994	See below

As authorized by FAR 52.246-11, the higher-level quality standard ANSI/ASQC E4 is tailored as follows:

The solicitation and contract require the offeror/contractor to demonstrate conformance to ANSI/ASQC E4 by submitting the quality documentation described below.

In addition, after award of the contract, the Contractor shall revise, when applicable, quality documentation submitted before award to address specific comments provided by EPA and submit the revised documentation to the Contracting Officer's Representative.

After award of the contract, the Contractor shall also implement all quality documentation approved by the Government.

EPA quality requirements documents may be accessed electronically at: http://www.epa.gov/quality/.

A. Pre-award Documentation:

The Offeror shall submit the following quality system documentation as a separate and identifiable part of its technical proposal:

(X)	Documentation	Specifications	Due
X	Quality Management Plan (QMP)	EPA Requirements for Quality Management Plans (QA/R-2) [dated 03/20/01]	With Offer

X	CASTNET Quality Assurance Project Plan (QAPP) Revision 8.2 with any proposed changes	EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01	With Offer

This documentation will be prepared in accordance with the specifications identified above or equivalent specifications defined by EPA's standard operating procedures. Work involving environmental data generation or use shall not commence until the Government has approved this documentation and incorporated it into the contract.

B. Post-award Documentation:

The Contractor shall submit the following quality system documentation to the Contracting Officer's Representative at the time frames identified below:

(X)	Documentation	Specifications	Due
X	Quality Assurance Project Plan (QAPP) for Each Applicable Project	EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01]	October 30, 2016
X	Standard Operating Procedures (SOPs)	EPA QA/G6, Guidance for Preparation of SOPs	October 30, 2016

This documentation will be prepared in accordance with the specifications identified above or equivalent specifications defined by EPA.

The Government will review and return the quality documentation, with comments, and indicating approval or disapproval. If necessary, the Contractor shall revise the documentation to address all comments and shall submit the revised documentation to the Government for approval within 30 days after receiving final comments.

The Contractor shall not commence work involving environmental data generation or use until the Government has approved the quality documentation.

SECTION F - Deliveries or Performance

F-1 Clauses

F-1 EPAAR 1552.211-72 MONTHLY PROGRESS REPORT. (JUN 1996)

(a) The Contractor shall furnish one (1) electronic PDF copy of the combined monthly technical and financial progress report stating the progress made, including the percentage of the project completed, and a description of the work accomplished to support the cost. The Contractor shall submit an export of their financial database as part of the invoice submittals in a format approved by the Project Officer (PO)."

(b) The final Monthly Progress Report format shall be designed by the Contractor and approved by the Contracting Officer's Representative (COR). Format changes may include minor changes to content but will not result in a significant financial burden to the Contractor. The Contractor shall submit a draft version of the report to the COR for approval of the format within 14 days after the effective date of the contract. The COR will notify the Contractor if any changes to the draft report format are required.
Once approved by EPA, each report format shall be followed monthly. Any deviations/changes to the approved report format must be approved by the COR.

(c) The Contractor shall provide specific discussions that include difficulties encountered and corrective action taken during the reporting period, and anticipated activity with a schedule of deliverables for the subsequent reporting period.

(d) The Contractor shall provide a list of outstanding actions awaiting Contracting Officer authorization, noted with the corresponding task order, such as subcontractor/consultant consents, overtime approvals, and task order proposal approvals.

(e) The report shall specify financial status at the contract level as follows:

(1) For the current reporting period, provide the invoice amount claimed.
(2) For the current contract year and total contract period of performance, provide: the current contract ceiling amount, the amount obligated, the amount originally invoiced, the amount paid, the amount suspended, the amount disallowed, and the remaining approved amount. The remaining approved amount is defined as the total obligated amount, less the total amount originally invoiced, plus total amount disallowed.
(3) For the current reporting period and total contract period of performance, provide the total amount of costs incurred by contract-level Performance Work Statement (PWS) task area and in total.
(4) For the current reporting period and total contract period of performance, provide the average hourly rate by contract-level PWS task area and in total.
(5) For the current reporting period and total contract period of performance, provide the total amount of costs incurred by task order and in total.
(6) For the total contract period of performance, provide a comparison of the funded amount across all task orders and the contract ceiling.
(7) *Labor hours.*
(i) For the current reporting period, provide a list of employees, their labor categories, their company (i.e. prime or subcontractor), and the numbers of hours worked.
(ii) For the next reporting period, provide the estimated direct labor hours and costs to be expended.
(8) *Materials.*
(i) For the current reporting period and total contract period of performance, provide the total costs incurred for materials (i.e. direct materials, subcontracts for which there is not a labor category, other direct costs, and applicable indirect costs) by type.
(ii) For the next reporting period, provide the estimated materials costs to be expended.
(9) *Unbilled allowable costs.* For the current reporting period and total contract period of performance, provide the total costs incurred but unbilled.

(f) The report shall specify financial status at the task order level as follows:

(1) For the current reporting period, provide the invoice amount claimed.

(2) For the current contract year and total task order period of performance, provide: the task order ceiling amount, the amount obligated, the amount originally invoiced, the amount paid, the amount suspended, the amount disallowed, and the remaining approved amount. The remaining approved amount is defined as the total obligated amount, less the total amount originally invoiced, plus total amount disallowed.

(3) For the current reporting period and total task order period of performance, provide the total amount of costs incurred by contract-level PWS task area and in total.

(4) For the current reporting period and total task order period of performance, provide the total amount of costs incurred by task order-level SOW task and in total.

(5) For the current reporting period and total task order period of performance, provide the average hourly rate by contract-level PWS task area and in total.

(6) For the total task order period of performance, provide a comparison of the funded amount and the task order ceiling.

(7) *Labor hours.*

(i) For the current reporting period, provide a list of employees, their labor categories, their company (i.e. prime or subcontractor), and the numbers of hours worked.

(ii) For the next reporting period, provide the estimated direct labor hours and costs to be expended.

(iii) For the remainder of the task order period of performance (not including option periods), provide the estimated direct labor hours and costs required to complete the task order.

(iv) *Average Labor Hours per Analysis Type.* Provide the average labor hours per analysis for each type of analysis (e.g. air, soil, water, etc.) completed during the reporting period.

(v) *Average Labor Cost per Analysis Type.* Provide the average labor cost per analysis for each type of analysis (e.g. air, soil, water, etc.) completed during the reporting period.

(8) *Materials.*

(i) For the current reporting period and total task order period of performance, provide the total costs incurred for materials (direct materials, subcontracts for which there is not a labor category, other direct costs, and applicable indirect costs) by type.

(ii) For the next reporting period, provide the estimated materials costs to be expended.

(9) *Unbilled allowable costs.* For the current reporting period and total task order period of performance, provide the total costs incurred but unbilled.

(10) Provide a list of deliverables for each task order during the reporting period.

(g) This submission does not change the notification requirements of the Section B clause, Limitation of Government's Obligation (EPA-B-32-103) requiring separate written notice to the Contracting Officer.

(h) The reports shall be submitted to the following addresses on or before 7 business days after the end of each billing cycle. See EPAAR 1552.232–70, Submission of Invoices, paragraph (e), for details on the timing of submittals. Distribute reports as follows: See Attachment 4 – Reporting Requirements.

F-2 Local Clauses EPA-F-12-101 PERIOD OF PERFORMANCE

The period of performance of the base contract shall be from contract award through 12 months from the effective date inclusive of all required reports. The maximum duration of this contract will be a Base Period of one (1) year, and four (4) option periods, not to exceed a total of 60 months.

F-3 FAR 52.242-15 STOP-WORK ORDER. (AUG 1989)

F-4 EPAAR 1552.211-75 WORKING FILES. (APR 1984)

F-5 EPAAR 1552.211-70 REPORTS OF WORK. (OCT 2000)

The Contractor shall prepare and deliver reports, including plans, evaluations, studies, analyses and manuals in accordance with Attachment 4 – Reporting Requirements. Each report shall cite the contract number, identify the U.S. Environmental Protection Agency as the sponsoring agency, and identify the name of the Contractor preparing the report.
The OMB clearance number for progress reports delivered under this contract is 2030-0005.

(End of clause)

SECTION G - Contract Administration Data

G-1 Clauses

G-1 EPAAR 1552.237-72 KEY PERSONNEL. (APR 1984)

(a) The Contractor shall assign to this contract the following key personnel:

Title	Name
(1) Project Manager or equivalent	(b)(4)
(2) Data Management, Analysis, Interpretation and Reporting Manager or equivalent	
(3) Project QA Supervisor or equivalent	
(4) QA Manager or equivalent	
(5) Field Operations Manager or equivalent	
(6) Laboratory Operations Manager or equivalent	

(b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) of this clause. After the initial 90-day period, the Contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 days prior to making any permanent substitutions.

(c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. This clause will be modified to reflect any approved changes of key personnel.

G-2 Local Clauses EPA-G-42-101 CONTRACT ADMINISTRATION REPRESENTATIVES

Contract-Level Contracting Officers Representatives (CORs) for this contract are as follows:

Primary COR:	Alternate COR:
Melissa Puchalski, OAR/OAP/CAMD	Gregory Beachley, OAR/OAP/CAMD
U.S. Environmental Protection Agency Headquarters	U.S. Environmental Protection Agency Headquarters
William Jefferson Clinton Building	William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W.	1200 Pennsylvania Avenue, N.W.
Mail Code 6204M	Mail Code 6204M
Phone: (202) 343-9882	Phone: (202) 343-9621
Email: Puchalski.melissa@epa.gov	Email: Beachley.gregory@epa.gov

Contracting Office officials responsible for administering this contract are as follows:

Contracting Officer:	Contract Specialist:
TBD	TBD

Address Line 1	Address Line 1
Address Line 2	Address Line 2
Address Line 3	Address Line 3
Phone:	Phone:
Email:	Email:

G-3 Local Clauses EPA-G-42-102 AUTHORIZED REPRESENTATIVE OF THE CONTRACT-LEVEL COR

(a) The Task Order Contracting Officer's Representative (TOCOR) referenced in the Technical Direction clause is the individual authorized by the Contracting Officer on an individual task order to:

(1) receive task order deliverables;

(2) receive copies of Monthly Progress Reports specific to the task order for which the TOCOR is authorized;

(3) attend meetings with the Contract-Level COR and Contractor in order to monitor progress of those task orders for which he/she is cognizant; and

(4) provide technical direction on those task orders subject to the limitations of the Technical Direction clause.

G-4 Local Clauses EPA-G-45-101 DESIGNATION OF PROPERTY ADMINISTRATOR

The property administrator for this contract is as follows:

Tina Harrison, OAR/OAS/FMSD/FOB

U.S. Environmental Protection Agency Headquarters

William Jefferson Clinton Building

1200 Pennsylvania Avenue, N.W.

Mail Code 3204R

Phone: (301) 275-6500

Email: Harrison.tina@epa.gov

The property administrator is the Contracting Officer's designated representative on property matters. The Contractor shall furnish all required information on property to the property administrator.

G-5 SUBMISSION OF INVOICES (EPAAR 1552.232-70) (JUN 1996) ALTERNATE I (JUN 1996)

In order to be considered properly submitted, an invoice or request for contract financing payment must meet the following contract requirements in addition to the requirements of FAR 32.905:

(a) The Contractor shall submit the invoice or request for contract financing payment either in electronic format.

(1) If submitting electronically, the Contractor shall follow the submission instructions at: http://www.epa.gov/ocfo/finservices/contracts.htm. One hard copy and one electronic copy via email of the invoice shall concurrently be sent to the Contract-Level COR.

(b) The Contractor shall prepare its invoice or request for contract financing payment on the prescribed Government forms. Standard Forms Number 1034, Public Voucher for Purchases and Services other than Personal, shall be used by contractors to show the amount claimed for reimbursement. Standard Form 1035, Public Voucher for Purchases and Services other than Personal - Continuation Sheet, shall be used to furnish the necessary

supporting detail or additional information required by the Contracting Officer. The Contractor may submit self designed forms which contain the required information.

(c)(1) The Contractor shall prepare a contract level invoice or request for contract financing payment in accordance with the invoice preparation instructions identified as a separate attachment in Section J of the contract. If contract work is authorized by individual task orders, the invoice or request for contract financing payment shall also include a summary of the current and cumulative amounts claimed by cost element for each task order and for the contract total, as well as any supporting data for each task order as identified in the instructions.

(2) The invoice or request for contract financing payment that employs a fixed rate feature shall include current and cumulative charges by contract labor category and by other major cost elements such as travel, equipment, and other direct costs. For current costs, each cost element shall include the appropriate supporting schedules identified in the invoice preparation instructions.
(d)(1) The charges for subcontracts shall be further detailed in a supporting schedule showing the major cost elements for each subcontract.

(2) On a case-by-case basis, when needed to verify the reasonableness of subcontractor costs, the Contracting Officer may require that the Contractor obtain from the subcontractor cost information in the detail set forth in (c)(2). This information should be obtained through a means which maintains subcontractor confidentiality (for example, via sealed envelopes), if the subcontractor expresses confidential business information (CBI) concerns.

(e) Invoices or requests for contract financing payment must clearly indicate the period of performance for which payment is requested. Separate invoices or requests for contract financing payment are required for charges applicable to the basic contract and each option period.

(f) (1) Notwithstanding the provisions of the clause of this contract at FAR 52.216-7, Allowable Cost and Payment, invoices or requests for contract financing payment shall be submitted once per month unless there has been a demonstrated need and Contracting Officer approval for more frequent billings. When submitted on a monthly basis, the period covered by invoices or requests for contractor financing payments shall be the same as the period for monthly progress reports required under this contract.

(2) If the Contracting Officer allows submissions more frequently than monthly, one submittal each month shall have the same ending period of performance as the monthly progress report.

(3) Where cumulative amounts on the Monthly Progress Report differ from the aggregate amounts claimed in the invoice(s) or request(s) for contract financing payments covering the same period, the Contractor shall provide a reconciliation of the difference as part of the payment request.

SECTION H - Special Contract Requirements

H-1 Clauses

H-1 EPAAR 1552.217-76 OPTION TO EXTEND THE EFFECTIVE PERIOD OF THE CONTRACT-INDEFINITE DELIVERY/INDEFINITE QUANTITY CONTRACT.

(a) The Government has the option to extend the effective period of this contract for four (4) additional period(s). If more than sixty (60) days remain in the contract effective period, the Government, without prior written notification, may exercise these option by issuing a contract modification. To unilaterally exercise these option periods, the Government must issue written notification of its intent to exercise the options prior to that last 60-day period. This preliminary notification does not commit the Government to exercising the options.

(b) If the options are exercised, the "Minimum and Maximum Contract Amount" clause will not be modified to reflect new and separate minimums and maximums

(c) The "Effective Period of the Contract" clause will be modified to cover a base period and options tbd at award .

H-2 EPAAR 1552.237-71 TECHNICAL DIRECTION. (AUG 2009)

(a) The Contract-level Contracting Officer's Representative (COR) is the primary representative of the Contracting Officer authorized to provide technical direction on contract performance.

(b) Individuals other than the COR may be authorized to provide technical direction. If individuals other than the COR are authorized to provide technical direction, their names will be specified in the contract or task order as appropriate. A Task Order COR (TOCOR) is authorized to provide technical direction, subject to the limitations set forth below, only on his/her task order.

(c) Technical direction includes:
(1) Direction to the Contractor which assists the Contractor in accomplishing the Statement of Work (SOW).
(2) Comments on and approval of reports or other deliverables.

(d) Technical direction must be within the contract Performance Work Statement (PWS) and the task order SOW. The COR or any other technical representative of the Contracting Officer does not have the authority to issue technical direction which:

(1) institutes additional work outside the scope of the contract or task order;
(2) constitutes a change as defined in the "Changes" clause;
(3) causes an increase or decrease in the estimated cost of the contract or task order
(4) alters the period of performance; or
(5) changes any of the other express terms or conditions of the contract or task order.

(e) Technical direction will be issued in writing or confirmed in writing within five (5) calendar days after verbal issuance. One copy of the technical direction memorandum will be forwarded to the Contracting Officer and the COR.

H-3 Local Clauses EPA-H-04-101 RETENTION AND AVAILABILITY OF CONTRACTOR FILES

(a) The contract contains the Federal Acquisition Regulation (FAR) Clause 52.215-2 ""Audit and Records - Negotiation (OCT 2010),"" wherein the contractor is required to maintain and make available to the Contracting Officer or representative of the Contracting Officer (in accordance with FAR Subpart 4.7, ""Contractor Records Retention"") at its office at all reasonable times the books, records, documents, and other evidence relating to this contract (including personnel utilization records, site records, and accounting procedures and practices sufficient to reflect properly all costs claimed to have been incurred under this contract). Such files shall be made available for examination, audit or reproduction.

(b) The contractor is advised that the Government may file suit against potential responsible parties for costs incurred relative to site-related response activities. In such proceedings, the contractor's cost and performance records may become an integral part of the Government's case.

(c) Accordingly, due to the extended nature of court proceedings and EPA audit requirements, the contractor shall make available to the Government, and only to the Government, the records described in (a) and (b) above for a period of ten (10) years after final payment under the contract (See FAR 4.703(b)(1)).

(d) In addition, the contractor shall make available to the Government, and only to the Government, the records relating to any appeals, litigation or the settlement of claims with third parties and which relate to this contract (i.e., cost recovery) until such appeals, litigation, or claims are disposed of.

(e) The contractor shall not destroy original records relating to the contract until (1) all litigation involving the records has been finally settled and approval is obtained from the Contracting Officer, or (2) ten (10) years have passed from the date of final payment, and no litigation involving the records has been instituted, and approval of the Contracting Officer is obtained. In no event should individual records be destroyed if litigation relating to such records is in-process or pending.

(f) From time to time, the Government may, in support of litigation cases, have the need for the contractor to research and make available such records in a form and manner not normally maintained by the contractor. Such effort shall be deemed to be within the scope of work under this contract. If this effort is required after performance of this contract, a separate negotiated procurement action may be instituted with the contractor.

H-4 Local Clauses EPA-H-07-102 IDENTIFICATION OF ON-SITE CONTRACTOR EMPLOYEES

All Contractor, subcontractor, and consultant personnel shall wear prominently displayed identification badges at all times when performing work on EPA property or attending meetings in the performance of this contract. The badge shall contain the individual's name, the company name and logo. When participating in such meetings (e.g., as a speaker, panel member), those individuals in Contractor employ must supplement physical identification (e.g., badges, place markers) with verbal announcements so that it is clear to the assembled group that they are employees of the Contractor, not Agency staff members. In addition, when working on EPA property, all contractor, subcontractor, and consultant personnel shall have signs visible on their desks or at their work sites that clearly state that they are not EPA employees.

H-5 Local Clauses EPA-H-09-107 UNPAID FEDERAL TAX LIABILITY & FELONY CRIMINAL VIOLATION CERTIFICATION (APR 2012)

(a) In order to meet the requirements of Sections 433 and 434 of Division E of the Consolidated Appropriations Act, 2012 (Pub.L. 112-74); 2013 Continuing Appropriations Resolution (Pub.L. 112-175); Consolidated and Further Continuing Appropriations Act, 2013 (Pub.L. 113-6); Continuing Appropriations Act, 2014 (Pub.L. 113-46), and subsequent relevant appropriations acts, the contractor shall provide the contracting officer a certification whereby the contractor certifies:

(i) It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months; and

(ii) It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(b) Failure of the contractor to furnish a certification or provide such additional information as requested by the contracting officer may render the contractor ineligible for FY 2012, 2013, 2014 or subsequent FY contract funding.

(c) The contractor has a continuing obligation to update the subject certification as required.

H-6 Local Clauses EPA-H-42-102 UTILIZATION OF FEDCONNECT FOR CONTRACT ADMINISTRATION

EPA will utilize the FedConnect® web portal in administering this contract. The contractor must be registered in FedConnect® and have access to the FedConnect website located at https://www.fedconnect.net/Fedconnect/. For assistance in registering or

for other FedConnect® technical questions please call the FedConnect® Help Desk at (800) 899-6665 or email at support@fedconnect.net.

End of clause

H-7 Local Clauses EPA-H-44-102 IDENTIFICATION OF SUBCONTRACTORS

(a) The purpose of this clause is to identify the subcontractors in the Contractor's proposal which resulted in award of this contract.

(b) Notwithstanding FAR clause 52.244-2, of this contract entitled "Subcontracts", it is hereby agreed to and understood that the following "team subcontractors" will perform the work under this contract as outlined in the Contractor's technical proposal incorporated in Section C of this contract:

(c) Any substitutions in the above listing of subcontractors which will result in a deviation from the Contractor's technical proposal which resulted in award of this contract shall be approved in writing by the Contracting Officer in advance of the substitution. The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, information required by the clause of this contract entitled "Subcontracts" and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the subcontractors being replaced. This clause may be modified upon approval of the requested substitutions by the Contracting Officer.

(d) This clause is not intended to grant consent to the above subcontracts. Subcontract consent will be granted in accordance with EPA procedures and the clause of this contract entitled "Subcontracts."

H-8 EPAAR 1552.203-71 Display of EPA Office of Inspector General Hotline Poster (Aug 2000)

H-9 EPAAR 1552.208-70 Printing (Dec 2005)

H-10 EPAAR 1552.209-71 Organizational Conflicts of Interest (May 1994)

H-11 EPAAR 1552.209-73 Notification of Conflicts Of Interest Regarding Personnel (May 1994)

H-12 EPAAR 1552.209-75 Annual Certification (May 1994)

H-13 EPAAR 1552.211-79 Compliance with EPA Policies for Information Resources Management (Oct 2000)

H-14 EPAAR 1552.227-76 Project Employee Confidentiality Agreement (May 1994)

H-15 EPAAR 1552.228-70 Insurance Liability to Third Persons (Oct 2000)

H-16 EPAAR 1552.232-73 Payments—Fixed-Rate Services Contract (Oct 2000)

H-17 EPAAR 1552.235-70 Screening Business Information for Claims of Confidentiality (Apr 1984)

H-18 EPAAR 1552.235-71 Treatment of Confidential Business Information (Apr 1984)

H-19 EPAAR 1552.235-73 Access to Federal Insecticide, Fungicide, and Rodenticide Act Confidential Business Information (Apr 1996)

H-20 EPAAR 1552.235-77 Data Security for Federal Insecticide, Fungicide and Rodenticide Act Confidential Business Information (Dec 1997)

H-21 EPAAR 1552.235-79 Release of Contractor Confidential Business Information (Apr 1996)

H-22 EPAAR 1552.237-75 Paperwork Reduction Act (Apr 1984)

H-23 EPAAR 1552.237-76 Government-Contractor Relations (Jun 1999)

(a) The Government and the Contractor understand and agree that the services to be delivered under this contract by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee relationship exists or will exist under the contract between the Government and the Contractor's personnel. It is, therefore, in the best interest of the Government to afford both parties a full understanding of their respective obligations.

(b) Contractor personnel under this contract shall not:

(1) Be placed in a position where they are under the supervision, direction, or evaluation of a Government employee.

(2) Be placed in a position of command, supervision, administration or control over Government personnel, or over personnel of other Contractors under other EPA contracts, or become a part of the Government organization.

(3) Be used in administration or supervision of Government procurement activities.

(c) Employee relationship. (1) The services to be performed under this contract do not require the Contractor or his/her personnel to exercise personal judgment and discretion on behalf of the Government. Rather the Contractor's personnel will act and exercise personal judgment and discretion on behalf of the Contractor.

(2) Rules, regulations, directives, and requirements that are issued by the U.S. Environmental Protection Agency under its responsibility for good order, administration, and security are applicable to all personnel who enter the Government installation or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.

(d) Inapplicability of employee benefits. This contract does not create an employer-employee relationship. Accordingly, entitlements and benefits applicable to such relationships do not apply.

(1) Payments by the Government under this contract are not subject to Federal income tax withholdings.

(2) Payments by the Government under this contract are not subject to the Federal Insurance Contributions Act.

(3) The Contractor is not entitled to unemployment compensation benefits under the Social Security Act, as amended, by virtue of performance of this contract.

(4) The Contractor is not entitled to workman's compensation benefits by virtue of this contract.

(5) The entire consideration and benefits to the Contractor for performance of this contract is contained in the provisions for payment under this contract.

(e) Notice. It is the Contractor's, as well as, the Government's responsibility to monitor contract activities and notify the Contracting Officer if the Contractor believes that the intent of this clause has been or may be violated.

(1) The Contractor should notify the Contracting Officer in writing promptly, within ____ (to be negotiated and inserted into the basic contract at contract award) calendar days from the date of any incident that the Contractor considers to constitute a violation of this clause. The notice should include the date, nature and circumstance of the conduct, the name, function and activity of each Government employee or Contractor official or employee involved or knowledgeable about such conduct, identify any documents or substance of any oral communication involved in the conduct, and the estimate in time by which the Government must respond to this notice to minimize cost, delay or disruption of performance.

(2) The Contracting Officer will promptly, within ____ (to be negotiated and inserted into the basic contract at contract award) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer will either:

(i) Confirm that the conduct is in violation and when necessary direct the mode of further performance,

(ii) Countermand any communication regarded as a violation,

(iii) Deny that the conduct constitutes a violation and when necessary direct the mode of further performance; or

(iv) In the event the notice is inadequate to make a decision, advise the Contractor what additional information is required, and establish the date by which it should be furnished by the Contractor and the date thereafter by which the Government will respond.

(End of clause)

H-24 SMALL DISADVANTAGED BUSINESS TARGETS (EPAAR 1552.219-73) (OCT 2000)

(a) In accordance with FAR 19.1202-4(a) and EPAAR 1552.219-72, the following small disadvantaged business (SDB) participation targets proposed by the Contractor are hereby incorporated into and made part of the contract:

(b) The following specifically identified SDB(s) was (were) considered under the Section-SDB participation evaluation factor or subfactor (continue on separate sheet if more space is needed):

The Contractor shall promptly notify the Contracting Officer of any substitution of firms if the new firms are not SDB concerns.

(c) In accordance with FAR 52.219-25, Small Disadvantaged Business Participation Program- Disadvantaged Status and Reporting, the Contractor shall report on the participation of SDB concerns in the performance of the contract no less than thirty (30) calendar days prior to each annual contractor performance evaluation or as otherwise directed by the contracting officer.

SECTION I - Contract Clauses

I-1 Clauses

I-1 FAR 52.202-1 DEFINITIONS. (NOV 2013)

I-2 FAR 52.203-3 GRATUITIES. (APR 1984)

I-3 FAR 52.203-5 COVENANT AGAINST CONTINGENT FEES. (MAY 2014)

I-4 FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT. (SEP 2006)

I-5 FAR 52.203-6 RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT. (SEP 2006) - ALTERNATE I (OCT 1995)

I-6 FAR 52.203-7 ANTI-KICKBACK PROCEDURES. (MAY 2014)

I-7 FAR 52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY. (MAY 2014)

I-8 FAR 52.203-13 CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT. (APR 2010)

I-9 FAR 52.203-14 DISPLAY OF HOTLINE POSTER(S). (DEC 2007)

EPA Hotline Poster may be obtained from: http://www.epa.gov/oig/hotline/html or write to EPA Office of Inspector General ATTN: OIG Hotline (2443) 1200 Pennsylvania Avenue, NW Washington, DC 20460

I-10 FAR 52.203-15 WHISTLEBLOWER PROTECTIONS UNDER THE AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009. (JUN 2010)

I-11 FAR 52.203-16 PREVENTING PERSONAL CONFLICTS OF INTEREST. (DEC 2011)

I-12 FAR 52.203-17 CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS. (APR 2014)

I-13 FAR 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER. (MAY 2011)

I-14 FAR 52.215-2 AUDIT AND RECORDS - NEGOTIATION. (OCT 2010)

I-15 FAR 52.215-8 ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT. (OCT 1997)

I-16 FAR 52.215-11 PRICE REDUCTION FOR DEFECTIVE CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (AUG 2011)

I-17 FAR 52.215-12 SUBCONTRACTOR CERTIFIED COST OR PRICING DATA. (OCT 2010)

I-18 FAR 52.215-19 NOTIFICATION OF OWNERSHIP CHANGES. (OCT 1997)

(a) The Contractor shall make the following notifications in writing:

(1) When the Contractor becomes aware that a change in its ownership has occurred, or is certain to occur, that could result in changes in the valuation of its capitalized assets in the accounting records, the Contractor shall notify the Administrative Contracting Officer (ACO) within 30 days.

(2) The Contractor shall also notify the ACO within 30 days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership.

(b) The Contractor shall -

(1) Maintain current, accurate, and complete inventory records of assets and their costs;

(2) Provide the ACO or designated representative ready access to the records upon request;

(3) Ensure that all individual and grouped assets, their capitalized values, accumulated depreciation or amortization, and remaining useful lives are identified accurately before and after each of the Contractor's ownership changes; and

(4) Retain and continue to maintain depreciation and amortization schedules based on the asset records maintained before each Contractor ownership change.

(c) The Contractor shall include the substance of this clause in all subcontracts under this contract that meet the applicability requirement of FAR 15.408(k).

(End of clause)

I-19 FAR 52.215-21 REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA - MODIFICATIONS. (OCT 2010)

I-20 FAR 52.216-7 ALLOWABLE COST AND PAYMENT. (JUN 2013)

(3) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request.

I-21 FAR 52.217-8 OPTION TO EXTEND SERVICES. (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 60 calendar days before the contract expiration date.

I-22 FAR 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT. (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 60 days of contract expiration; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed 5 years.

(End of clause)

I-23 FAR 52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS. (OCT 2014)

I-24 FAR 52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN. ALTERNATE II (OCT 2001)

I-25 FAR 52.219-16 LIQUIDATED DAMAGES - SUBCONTRACTING PLAN. (JAN 1999)

I-26 FAR 52.222-3 CONVICT LABOR. (JUN 2003)

I-27 FAR 52.222-21 PROHIBITION OF SEGREGATED FACILITIES. (APR 2015)

I-28 FAR 52.222-26 EQUAL OPPORTUNITY. (APR 2015)

I-29 FAR 52.222-35 EQUAL OPPORTUNITY FOR VETERANS. (JUL 2014)

(a) Definitions. As used in this clause-

"Active duty wartime or campaign badge veteran," "Armed Forces service medal veteran," "disabled veteran," "protected veteran," "qualified disabled veteran," and "recently separated veteran" have the meanings given at FAR 22.1301.

(b) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-300.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified protected veterans, and requires affirmative action by the Contractor to employ and advance in employment qualified protected veterans.

(c) Subcontracts. The Contractor shall insert the terms of this clause in subcontracts of $100,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

I-30 FAR 52.222-36 EQUAL OPPORTUNITY FOR WORKERS WITH DISABILITIES. (JUL 2014)

(a) Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

(b) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

(End of clause)

I-31 FAR 52.222-37 EMPLOYMENT REPORTS ON VETERANS. (JUL 2014)

I-32 FAR 52.222-40 NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT. (DEC 2010)

I-33 FAR 52.222-41 SERVICE CONTRACT LABOR STANDARDS. (MAY 2014)

I-34 FAR 52.222-43 FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT LABOR STANDARDS-PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS). (MAY 2014)

I-35 FAR 52.222-50 COMBATING TRAFFICKING IN PERSONS. (MAR 2015)

I-36 FAR 52.222-51 EXEMPTION FROM APPLICATION OF THE SERVICE CONTRACT LABOR STANDARDS TO CONTRACTS FOR MAINTENANCE, CALIBRATION, OR REPAIR OF CERTAIN EQUIPMENT-REQUIREMENTS. (MAY 2014)

I-37 FAR 52.222-53 EXEMPTION FROM APPLICATION OF THE SERVICE CONTRACT LABOR STANDARDS TO CONTRACTS FOR CERTAIN SERVICES-REQUIREMENTS. (MAY 2014)

I-38 FAR 52.223-6 DRUG-FREE WORKPLACE. (MAY 2001)

I-39 FAR 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING. (AUG 2011)

FAR 52.225-3 BUY AMERICAN - FREE TRADE AGREEMENTS - ISRAELI TRADE ACT. (MAY 2014) - ALTERNATE II (MAY 2014)

I-41 FAR 52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES. (JUN 2008)

I-42 FAR 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014)

I-43 FAR 52.227-14 RIGHTS IN DATA-GENERAL. (MAY 2014) - ALTERNATE V (DEC 2007)

I-44 FAR 52.230-2 COST ACCOUNTING STANDARDS. (MAY 2014)

I-45 FAR 52.230-3 DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES. (MAY 2014)

I-46 FAR 52.230-6 ADMINISTRATION OF COST ACCOUNTING STANDARDS. (JUN 2010)

I-47 FAR 52.232-7 PAYMENTS UNDER TIME-AND-MATERIALS AND LABOR-HOUR CONTRACTS. (AUG 2012)

> (2) The designated payment office will make interim payments for contract financing on the 30th day after the designated billing office receives a proper payment request. In the event that the Government requires an audit or other review of a specific payment request to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the specified due date.

I-48 FAR 52.232-8 DISCOUNTS FOR PROMPT PAYMENT. (FEB 2002)

I-49 FAR 52.232-17 INTEREST. (MAY 2014)

I-50 FAR 52.232-18 AVAILABILITY OF FUNDS. (APR 1984)

I-51 FAR 52.232-23 ASSIGNMENT OF CLAIMS. (MAY 2014)

I-52 FAR 52.232-25 PROMPT PAYMENT. (JUL 2013)

I-53 FAR 52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER - SYSTEM FOR AWARD MANAGEMENT. (JUL 2013)

I-54 FAR 52.232-36 PAYMENT BY THIRD PARTY. (MAY 2014)

I-55 FAR 52.232-37 MULTIPLE PAYMENT ARRANGEMENTS. (MAY 1999)

I-56 FAR 52.232-39 UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS. (JUN 2013)

I-57 FAR 52.233-1 DISPUTES. (MAY 2014)

I-58 FAR 52.233-3 PROTEST AFTER AWARD. (AUG 1996)

I-59 FAR 52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM. (OCT 2004)

I-60 FAR 52.237-2 PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION. (APR 1984)

I-61 FAR 52.242-3 PENALTIES FOR UNALLOWABLE COSTS. (MAY 2014)

I-62 FAR 52.242-4 CERTIFICATION OF FINAL INDIRECT COSTS. (JAN 1997)

I-63 FAR 52.242-13 BANKRUPTCY. (JUL 1995)

I-64 FAR 52.243-3 CHANGES - TIME-AND-MATERIALS OR LABOR-HOURS. (SEP 2000)

I-66 FAR 52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS. (APR 2015)

I-67 FAR 52.245-1 GOVERNMENT PROPERTY. (APR 2012)

I-68 FAR 52.245-2 GOVERNMENT PROPERTY INSTALLATION OPERATION SERVICES. (APR 2012)

(a) This Government Property listed in paragraph (e) of this clause is furnished to the Contractor in an "as-is, where is" condition. The Government makes no warranty regarding the suitability for use of the Government property specified in this contract. The Contractor shall be afforded the opportunity to inspect the Government property as specified in the solicitation.

(b) The Government bears no responsibility for repair or replacement of any lost Government property. If any or all of the Government property is lost or becomes no longer usable, the Contractor shall be responsible for replacement of the property at Contractor expense. The Contractor shall have title to all replacement property and shall continue to be responsible for contract performance.

(c) Unless the Contracting Officer determines otherwise, the Government abandons all rights and title to unserviceable and scrap property resulting from contract performance. Upon notification to the Contracting Officer, the Contractor shall remove such property from the Government premises and dispose of it at Contractor expense.

(d) Except as provided in this clause, Government property furnished under this contract shall be governed by the Government Property clause of this contract.

(e) Government property provided under this clause: TBD at award

(End of clause)

I-69 FAR 52.245-9 USE AND CHARGES (APR 2012)

I-70 FAR 52.246-25 LIMITATION OF LIABILITY - SERVICES. (FEB 1997)

I-71 FAR 52.249-14 EXCUSABLE DELAYS. (APR 1984)

I-72 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE. (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es): FAR:http://farsite.hill.af.mil/vffara.htm EPAAR: http://farsite.hill.af.mil/vfepaara.htm

(End of clause)

I-73 FAR 52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES. (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any Environmental Protection Agency (48 CFR (48 CFR Chapter 1515)) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

(End of clause)

I-74 FAR 52.253-1 COMPUTER GENERATED FORMS. (JAN 1991)

I-75 FAR INDEFINITE QUANTITY 52.216-22 (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 180 calendar days beyond the expiration date of the contract.

I-76 FAR 52.216-18 ORDERING (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from the effective date of award through the last day of the contract period of performance.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

I-77 FAR 52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than $3,000.00, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor—

(1) Any order for a single item in excess of $5,000,000;

(2) Any order for a combination of items in excess of $29,123,740; or

(3) A series of orders from the same ordering office within 15 calendar days that together call for quantities exceeding the limitation in paragraph (b)(1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within three (3) business days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

I-78 ORDERING—BY DESIGNATED ORDERING OFFICERS (EPAAR 1552.216-72) (APR 1984) ALTERNATE I (APR 1984)

(a) The Government will order any supplies and services to be furnished under this contract by issuing task/delivery orders on Optional Form 347, or any agency prescribed form, at any time during the contract period of performance. In addition to the Contracting Officer, the following individuals are authorized ordering officers:

Any EPA Contracting Officer operating within his/her warrant authority

(b) A Standard Form 30 will be the method of amending task/delivery orders.

(c) The Contractor shall acknowledge receipt of each order and shall prepare and forward to the Ordering Officer within ten (10) calendar days the proposed staffing plan for accomplishing the assigned task within the period specified.

(d) If the Contractor considers the estimated labor hours or specified work completion date to be unreasonable, the Contractor shall promptly notify the Ordering Officer and Contracting Officer in writing within three (3) calendar days, stating why the estimated labor hours or specified completion date is considered unreasonable.

(e) Each task/delivery order will have a ceiling price, which the Contractor may not exceed. When the Contractor has reason to believe that the labor payment and support costs for the order, which will accrue in the next thirty (30) calendar days, will bring total cost to over 85 percent of the ceiling price specified in the order, the Contractor shall notify the Ordering Officer.

(f) Paragraphs (c), (d), and (e) of this clause apply only when services are being ordered.

I-79 FAR 52.223-18 ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING (AUG 2011)

I-80 FAR 52.219-28 POST-AWARD SMALL BUSINESS PROGRAM REPRESENTATION

I-81 FAR 52.216-24 LIMITATION OF GOVERNMENT LIABILITY. (APR 1984)

I-82 FAR 52.249-6 TERMINATION (COST-REIMBURSEMENT) ALTERNATE IV (SEPT 1996)

I-83 FAR 52.232-22 LIMITATION OF FUNDS (APR 1984)

SECTION J - List of Documents, Exhibits and Other Attachments

J-1 Local Clauses EPA-J-52-101 LIST OF ATTACHMENTS

Attachment 1. Statement of Work (SOW)
Attachment 2. Government Furnished Equipment (GFE)
Attachment 3. Labor Category Descriptions
Attachment 4. Reporting Requirements
Attachment 5. Invoice Preparation Instructions
Attachment 6. Quality Management Plan (QMP) dated July 2015
Attachment 7. Quality Assurance Project Plan (QAPP) revision 8.2
Attachment 8. Subcontracting Plan dated February 2016
Attachment 9. Accreditation Certificate for Required Testing Methods/Procedure Accreditation dated July 2015
Attachment 10. Property Management Plan dated October 2014
Attachment 11. Service Contract Act (SCA) Wage Determination dated TBD by CO at time of award
Attachment 12. Ordering Instructions

SECTION K - Representations, Certifications, and Other Statements of Bidders

K-1 Clauses

K-1 FAR 52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS. (DEC 2014)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 541620.

(2) The small business size standard is $15 million.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b)(1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

[X] (i) Paragraph (d) applies.

[] (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c)(1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless-

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures; or

(C) The solicitation is for utility services for which rates are set by law or regulation.

(ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed $150,000.

(iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include provision at 52.204-7, System for Award Management.

(iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that-

(A) Are not set aside for small business concerns;

(B) Exceed the simplified acquisition threshold; and

(C) Are for contracts that will be performed in the United States or its outlying areas.

(v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations-Representation.

(vi) 52.209-5, Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.

(vii) 52.214-14, Place of Performance-Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.

(viii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.

(ix) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.

(A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.

(B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.

(x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.

(xi) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.

(xii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xiii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA-designated items.

(xvi) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvii) 52.225-4, Buy American-Free Trade Agreements-Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225-3.

(A) If the acquisition value is less than $25,000, the basic provision applies.

(B) If the acquisition value is $25,000 or more but is less than $50,000, the provision with its Alternate I applies.

(C) If the acquisition value is $50,000 or more but is less than $79,507, the provision with its Alternate II applies.

(D) If the acquisition value is $79,507 or more but is less than $100,000, the provision with its Alternate III applies.

(xviii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan-Certification. This provision applies to all solicitations.

(xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran-Representation and Certifications. This provision applies to all solicitations.

(xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following certifications are applicable as indicated by the Contracting Officer:

(Contracting Officer check as appropriate.)

[] (i) 52.204-17, Ownership or Control of Offeror.

[] (ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

[] (iii) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Certification.

[] (iv) 52.222-52, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Certification.

[] (v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

[] (vi) 52.227-6, Royalty Information.

[] (A) Basic.

[] (B) Alternate I.

[] (vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

(d) The offeror has completed the annual representations and certifications electronically via the SAM Web site accessed through *https://www.acquisition.gov*. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below (offeror to insert changes, identifying change by clause number, title, date). These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause No.[]

Title[]

Date[]

Change[]

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

(End of provision)

K-2 FAR 52.209-7 INFORMATION REGARDING RESPONSIBILITY MATTERS. (JUL 2013)

(a) Definitions. As used in this provision-

"Administrative proceeding" means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

"Federal contracts and grants with total value greater than $10,000,000" means-

(1) The total value of all current, active contracts and grants, including all priced options; and

(2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

"Principal" means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror [X] has [] does not have current active Federal contracts and grants with total value greater than $10,000,000.

(c) If the offeror checked "has" in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

(1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:

(i) In a criminal proceeding, a conviction.

(ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more.

(iii) In an administrative proceeding, a finding of fault and liability that results in-

(A) The payment of a monetary fine or penalty of $5,000 or more; or

(B) The payment of a reimbursement, restitution, or damages in excess of $100,000.

(iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the

proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.

(2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.

(d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIIS as required through maintaining an active registration in the System for Award Management database via *https://www.acquisition.gov* (see 52.204-7).

(End of provision)

K-3 FAR 52.225-25 PROHIBITION ON CONTRACTING WITH ENTITIES ENGAGING IN CERTAIN ACTIVITIES OR TRANSACTIONS RELATING TO IRAN-REPRESENTATION AND CERTIFICATIONS. (DEC 2012)

K-4 FAR 52.230-1 COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION. (MAY 2012)

Note: This notice does not apply to small businesses or foreign governments. This notice is in three parts, identified by Roman numerals I through III.

Offerors shall examine each part and provide the requested information in order to determine Cost Accounting Standards (CAS) requirements applicable to any resultant contract.

If the offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS coverage pursuant to 48 CFR 9903.201-2(c)(5) or 9903.201-2(c)(6), respectively.

I. Disclosure Statement - Cost Accounting Practices and Certification

(a) Any contract in excess of $700,000 resulting from this solicitation will be subject to the requirements of the Cost Accounting Standards Board (48 CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.

(b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

Caution: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to practice for pricing proposals or accumulating and reporting contract performance cost data.

(c) Check the appropriate box below:

[] (1) *Certificate of Concurrent Submission of Disclosure Statement*. The offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows:

(i) Original and one copy to the cognizant Administrative Contracting Officer (ACO) or cognizant Federal agency official authorized to act in that capacity (Federal official), as applicable; and

(ii) One copy to the cognizant Federal auditor.

(Disclosure must be on Form No. CASB DS-1 or CASB DS-2, as applicable. Forms may be obtained from the cognizant ACO or Federal official and/or from the loose-leaf version of the Federal Acquisition Regulation.)

Date of Disclosure Statement: []

The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.

[X] (2) *Certificate of Previously Submitted Disclosure Statement*. The offeror hereby certifies that the required Disclosure Statement was filed as follows:

Date of Disclosure Statement: _10 June 2010. Revision 11 effective 1 January 2016. Name and Address of Cognizant ACO or Federal Official Where Filed: Mr. Frank Caruso, DCMA Surface and Support Systems Philadelphia, 700 Robbins Avenue, Building 4-A, Philadelphia PA 19111_____

The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement.

[] (3) *Certificate of Monetary Exemption*. The offeror hereby certifies that the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated prime contracts and subcontracts subject to CAS totaling $50 million or more in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

[] (4) *Certificate of Interim Exemption*. The offeror hereby certifies that (i) the offeror first exceeded the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit a revised certificate to the Contracting Officer, in the form specified under subparagraph (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

Caution: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of $50 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

II. Cost Accounting Standards - Eligibility for Modified Contract Coverage

If the offeror is eligible to use the modified provisions of 48 CFR 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

[] The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than $50 million in awards of CAS-covered prime contracts and subcontracts. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

Caution: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of $50 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of $50 million or more.

III. Additional Cost Accounting Standards Applicable to Existing Contracts

The offeror shall indicate below whether award of the contemplated contract would, in accordance with subparagraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

[] yes [X] no

(End of provision)

K-5 FAR 52.230-7 PROPOSAL DISCLOSURE--COST ACCOUNTING PRACTICE CHANGES. (APR 2005)

The offeror shall check "yes" below if the contract award will result in a required or unilateral change in cost accounting practice, including unilateral changes requested to be desirable changes.

___ Yes __X_ No

If the offeror checked "Yes" above, the offeror shall--

(1) Prepare the price proposal in response to the solicitation using the changed practice for the period of performance for which the practice will be used; and

(2) Submit a description of the changed cost accounting practice to the Contracting Officer and the Cognizant Federal Agency Official as pricing support for the proposal.

(End of provision)

K-6 EPAAR 1552.209-72 ORGANIZATIONAL CONFLICT OF INTEREST CERTIFICATION. (APR 1984)

K-7 EPAAR 1552.224-70 SOCIAL SECURITY NUMBERS OF CONSULTANTS AND CERTAIN SOLE PROPRIETORS AND PRIVACY ACT STATEMENT. (APR 1984)

K-8 Local Clauses EPA-K-04-101 REPRESENTATION BY CORPORATIONS REGARDING A FELONY CONVICTION UNDER FEDERAL LAW OR UNPAID FEDERAL TAX LIABILITY (APR 2012)

(a) In accordance with Sections 433 and 434 of the Department of the Interior, Environment, and Related Agencies Appropriations Act, 2012 (Pub. L. 112-74); 2013 Continuing Appropriations Resolution (Pub.L. 112-175); Consolidated and Further Continuing Appropriations Act, 2013 (Pub.L. 113-6); Continuing Appropriations Act, 2014 (Pub.L. 113-46), and subsequent relevant appropriations acts, none of the funds made available by the Act may be used to enter into a contract with any corporation that:

(1) Was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the government;

(2) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the government.

(b) The Offeror represents that:

(1) It is [ ] is not [X] a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months,

(2) It is [ ] is not [X] a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(c) The Offeror shall provide immediate written notice to the contracting officer if, at any time prior to contract award, the Offeror learns that its representation was erroneous when submitted or has become erroneous by reason of changed circumstances.

(d) A representation that any of the items in paragraph (b) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, failure of the Offeror to furnish a representation or provide such additional information as requested by the contracting officer may render the Offeror nonresponsible.

(e) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the representation required by paragraph (b) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(f) The representation in paragraph (b) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly provided an erroneous

representation, in addition to other remedies available to the Government, the contracting officer may terminate the contract resulting from this solicitation for default.

THIS REPRESENTATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT REPRESENTATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

CASTNET V Statement of Work (SOW)

Project Background

The Clean Air Status and Trends Network (CASTNET) is a long-term environmental monitoring network that measures changes in ambient air quality and assesses atmospheric deposition over broad geographic regions of the U.S. (http://www.epa.gov/castnet). Operating since 1987, CASTNET has evolved into a robust regional monitoring program which currently consists of approximately 95 monitoring stations nationwide. The Environmental Protection Agency (EPA) coordinates the operation of the network in cooperation with numerous federal, tribal, state and local partners. Figure 1 lists shows the location of CASTNET sites operating as of October 2015. A complete list of monitoring sites with coordinates is included in Appendix 1.

The primary monitoring objectives of CASTNET are to:

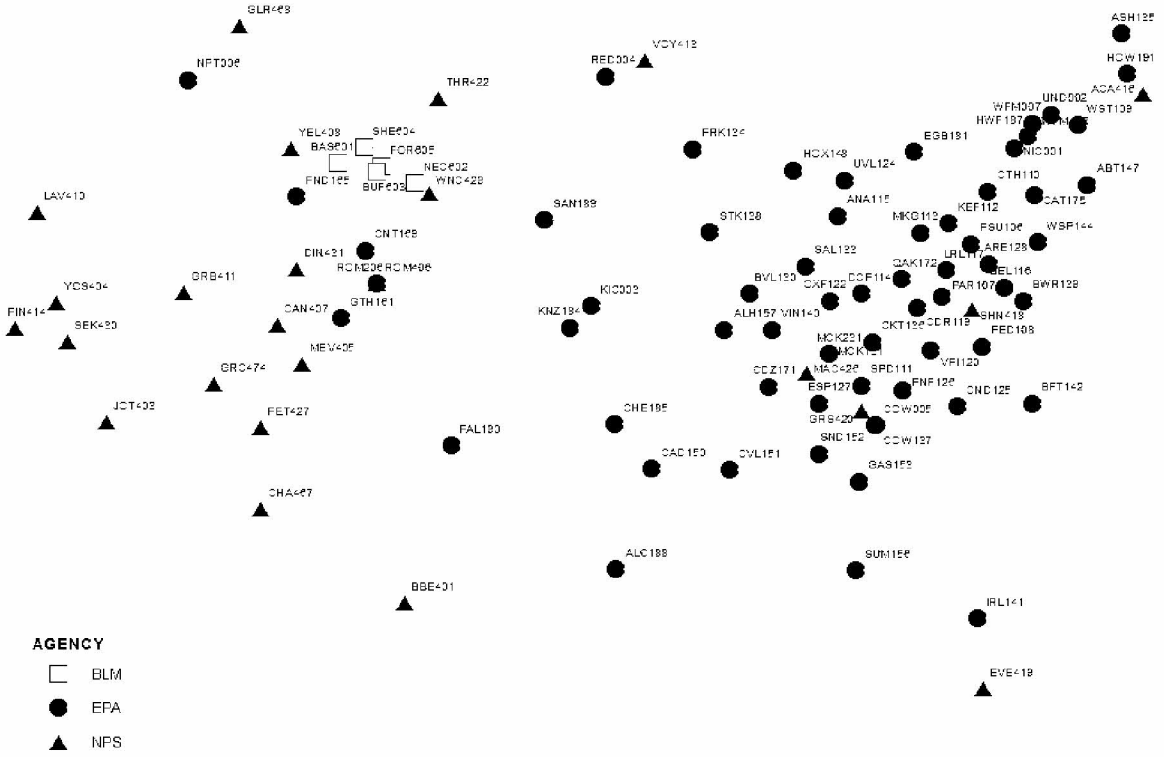
- Provide high quality data on atmospheric deposition, rural ground level ozone and other forms of atmospheric pollution;
- Support the primary and secondary ozone NAAQS and provide data on NAAQS compliance in rural areas;
- Monitor the status and trends in regional air quality and atmospheric deposition;
- Assess and report on geographic patterns and long-term, temporal trends in ambient air pollution and atmospheric deposition;
- Improve our understanding of PM and ozone formation;
- Validate and improve atmospheric models;
- Provide data for health-based research and epidemiology studies;
- Assess the effectiveness of EPA's emission reduction programs; and
- Support science and ecosystem studies.

CASTNET sites measure weekly average concentrations of sulfate (SO_4^{2-}), nitrate (NO_3^-), ammonium (NH_4^+), sulfur dioxide (SO_2), nitric acid (HNO_3), chloride (Cl^-) and the base cations (Na^+, K^+, $Mg^{2+}$and Ca^{2+}) using a 3-stage filter pack. In addition, each site may make ancillary measurements, including hourly ozone (O_3), hourly meteorology, ammonia (NH_3) gas using passive devices, and trace-level gases. Trace-level gas monitors include reactive oxidized nitrogen (NOy), nitric oxide (NO), sulfur dioxide (SO_2) and carbon monoxide (CO). CASTNET O_3, meteorological, and trace gas measurements follow the requirements in the Code of Federal Regulations (CFR) and EPA's Quality Assurance Handbook. A list of the ambient monitoring and meteorological measurement systems currently deployed at CASTNET sites is included as Appendix 2.

As a long-term regional monitoring program, CASTNET is critical for characterizing trends in deposition levels and identifying relationships among emissions, atmospheric loadings, ecological effects and human health. The EPA, other government agencies and the scientific community rely on the data and information from CASTNET, used in conjunction with information from other national monitoring networks (e.g., the National Atmospheric Deposition Program/National Trends Network (NADP/NTN), NADP's Ammonia Monitoring Network (AMoN), NCore, the Chemical Speciation and Trends Network (CSN), and Interagency Monitoring of Protected Visual Environments (IMPROVE)), to evaluate the effectiveness of air pollution control strategies for regional areas and assess chemical changes in the atmosphere. Since atmospheric changes occur very slowly and trends are often obscured by the wide variability of measurements and climate, numerous years of continuous and consistent data are required to overcome this variability.

The EPA's Office of Atmospheric Programs manages CASTNET and is committed to regional atmospheric monitoring to assess long-term environmental trends. The Clean Air Markets Division (CAMD), Office of Atmospheric Programs (OAP), is the lead in providing support and technical direction for CASTNET. Additional background information, current standard operating procedures (SOPs), and the CASTNET Quality Assurance Project Plan (QAPP) are available at http://www.epa.gov/castnet.

Figure 1 Map of Active CASTNET Monitoring Sites (January 2016)



SOW Overview

The Contractor shall provide the necessary technical support as described in this SOW to assist the EPA in the operation of the CASTNET program. The scope of this SOW includes specific requirements for the Core operation of the CASTNET program (Task 1) with additional Tasks issued to provide for specific activities at CASTNET sites. For these additional tasks, the monetary value, technical time and operational needs vary with the number of sites and activities performed at each site, and are reflected in this SOW. Tasks 1-21 are considered the Base Program. Task 22, Level of Effort/Special Studies, includes tasks that may include short-term research projects or indeterminate costs (land leases).

Task 1, Core Operations, includes requirements that do not vary in scope or cost with the number of monitoring sites. Task 1 will be exercised by EPA for each month in the Base Period and any subsequent option periods. Measurements made at each EPA-sponsored CASTNET site will be ordered through the remaining Tasks (2-21). For example, the Agency would order 1 unit for the

operation of one filter pack at a typical CASTNET site (Task 2 or 3) for one month. Task 2 represents operating a filter pack flow system at a site with an operator that is a subcontractor to the Contractor. Task 3 represents with operating a filter pack flow system at a site without an operator (i.e. the operator is a partner, or supported through another agency, that performs on-site duties). Tasks 2 and 3 would include calibrating the mass flow controller, validating the flow and concentration data, and maintenance activities related to the tower, mass flow controller, data logger and pump. The Tasks are set up to allow flexibility in the operation of the network.

Task 14, filter media analysis, will be exercised for each CASTNET site with a filter pack. Under this Task, the Contractor will perform the laboratory analyses for weekly filter packs and QC checks. Units exercised under this Task are based on the number of filters analyzed for each site, including samples and necessary QC analyses. Task 14 is a fixed price (per unit) Task. Task 14 will be exercised by EPA for each filter media analysis in the Base Period and any subsequent option periods for each filter pack CASTNET site. Additional units may also be ordered for special studies or sampling performed under the Level of Effort (LOE)/Special Studies Task (Task 22). Furthermore, independent laboratory audit samples will be analyzed and reported to the appropriate organization under Task 15, artificial precipitation audit sample. Task 15 is also a fixed price (per unit) Task.

Tasks 1-22, with the exception of Tasks 14 and 15 are fixed rate Time & Materials Tasks. The unit price proposed by the Contractor for each fixed rate Task is an estimate of labor, ODCs, travel, and G&A for the work described.

The following is an example of how units may be ordered for the Rocky Mountain National Park, CO (ROM206) EPA-sponsored CASTNET site for one year of operation (12 months). ROM206 includes a filter pack, an ozone analyzer, and a NO/NOy analyzer. For this example, we will also assume that EPA installed an NTN sampler 6-months into the option period. The Contractor would provide a site operator at this site.

Table 1 Example of units that would be ordered for a CASTNET site for a 12-month option period

Task	**Description**	**Site**	**Units**
2	Dry deposition filter pack with an operator	1	12
4	Ozone monitoring with an operator	1	12
8	Continuous NO/NOy operation with an operator	1	12
14	Filter pack preparation and analysis	1	59.11
16	Operation of NADP sampler – collocated with filter pack	1	6

Required Tasks

Task 1: Core Network Operations

The objective of Core Network Operations is to provide essential services for operating the network as whole. In general, these are activities that would be required regardless of the number of sites operating in the network, and include project management, data management, provisions for maintaining network property and quality assurance. The operation of individual site measurements and other activities that are routine activities for each site are provided through Tasks 2-21. Activities and tasks that are dependent on the number and type of monitoring locations, such as site utilities, telemetry to the site (e.g., phone or internet service) and site land leases, shall be provided through the Task 22 and shall not be included under Task 1 Core Operations. The following sections describe the specific requirements for this task.

1.1 Data Management and Analysis

The Contractor shall be responsible for data storage and reporting of all information acquired in this Statement of Work, including data acquired under Task 22.

EPA will provide an archive of historical operations, deposition and air quality data acquired during previous contract periods. The Contractor shall maintain these archives in conjunction with data and information acquired in this contract period.

To manage and report this information efficiently and accurately while continuing to acquire data from on-going operations, the Contractor shall manage a database management system (DBMS) in a development/testing/production environment.

The Contractor shall be responsible for managing all information described in this Statement of Work, including the data management activities required for data collection, processing, validation, storage, documentation and reporting. All data shall be identified, documented with appropriate metadata and stored in the database. The types of data include, but are not limited to:

- All continuous measurements, observations and equipment status data generated by the Network. All continuous data and equipment status data shall be stored in the database with a minimum time resolution of one hour.

- Field observations made by the site operators. Non-routine field observations maybe be transcribed from hard copy forms or field notebooks sent in by the site operator.
- Results of laboratory analyses, including those types for routine samples, routine quality assurance samples, samples for method development or special studies, internal and external laboratory audits, internal and external system audits, and inter-laboratory comparisons.
- Site status and location data for any sampling location, including latitude, longitude, elevation, political address (e.g., country, state, and county), conditions and surroundings within 1 km, site contacts, and site operators and their contact information.
- Site photos and maps. All site photos shall be stored as binary objects in the database or as references to electronic images. The referenced electronic image shall be considered part of the database.
- Measurements and criteria from field calibrations and audits.
- Model results.
- Special studies and non-traditional sampling methods.
- Quality assurance information from routine and non-routine sources.
- The National Park Service's (NPS) and Bureau of Land Management Wyoming State Office (BLM-WSO) CASTNET data. The Contractor shall import and manage all available CASTNET data acquired by the NPS and BLM-WSO for the operation of their CASTNET sites for all types of data listed above. The NPS and BLM-WSO or their designee will deliver data electronically to the Contractor in a format agreeable to EPA, NPS and BLM-WSO.

The Contractor shall maintain a data dictionary of all objects within the database, including tables, columns, constraints, and data validation codes. The Contractor shall use established good data practices to ensure that database objects and applications developed by the Contractor have been properly tested and documented before use in the production environment. The Contractor shall ensure that all electronic data acquisitions and transfers into and from the database are accurate and complete by checksum comparisons, or equivalent methods.

The EPA currently uses the Oracle® Enterprise Database 11g Release 2 (11.2.0.1.0) DBMS in a UNIX environment. The EPA anticipates that this platform will be used throughout the life of this contract, although upgrades to the DBMS and operating system are likely. A description of

the CASTNET schema is attached as Attachment 15. Upon award of the contract the EPA will provide the Contractor a complete and functional archive of the current contractor's Oracle database, and a complete and functional export of the EPA's Oracle schema.

1.1.1 Data Reporting

The Contractor shall deliver data to the EPA electronically for loading into the EPA database with a minimum amount of human intervention and sufficient quality assurance checks and procedures to ensure that each data transfer has been accomplished accurately and completely. If the Contractor requires connection to the EPA servers for data transfers, the Contractor must conform to requirements for access to the EPA servers described at http://www2.epa.gov/webguide/access-epa-servers-and-tssms-accounts#outside
Table 2 lists the routine data deliverables the Contractor shall submit to the EPA Project Officer (PO) and Task Order Project Manager (TOPO). See Table 1-6 CASTNET Routine Data Reporting in the CASTNET QAPP v. 8.2 for a full list of the required data deliverables. Additionally, all data from laboratory analyses and special studies shall be delivered by the Contractor to EPA with 120 calendar days of sample collection.

Table 2 Delivery schedule for routine CASTNET measurements

Delivery Schedule for CASTNET Data			
Type of data	**Delivery Destination**	**Frequency**	**Delivery Schedule**
Ozone, trace gas, and meteorology	AirNow (http://www.airnowtech.org/)	Hourly	Within 1 hour after a collection hour is complete
Continuous analyzers (e.g., ozone, NOy, SO_2, and meteorology)	USEPA/CAMD	Daily	Within 24 hours of the end of the data collection day (Level 1)
Laboratory analyses	USEPA/CAMD	Monthly	Within 90 calendar days of the end of the data collection month (Level 1)
Special studies or LOE tasks, unless otherwise specified	USEPA/CAMD	Monthly	Within 120 calendar days of the end of the data collection month

Site photos	USEPA/CAMD	Monthly	Within 90 calendar days of the end of the calibration month
Flow and laboratory analyses	USEPA/CAMD	Monthly	Within 90 calendar days of the end of the calibration month (Level 3)
Continuous data (ozone, trace gas, meteorology)	USEPA/CAMD	Monthly	Within 90 calendar days of the end of the calibration month (Level 3)
40 CFR compliant data (ozone, trace gas)	AQS	Quarterly	Within 90 calendar days after the end of the quarterly reporting period (Level 3)
Complete database export	USEPA/CAMD	Annual	Within 30 calendar days of the end of the year

All ozone, trace gas and meteorological data shall be submitted to AIRNow through AirNow Tech by the Contractor. The data format specification may be obtained from http://www.airnowtech.org/Resources/AIRNow-I_AQCSV-Final.pdf.

All data collected utilizing 40 CFR Parts 50, 53, 58 requirements shall be submitted to the AQS database by the Contractor utilizing AQS protocols and reporting schedules. AQS manuals and guides may be obtained from http://www.epa.gov/ttn/airs/airsaqs/.

Final data acquired through this contract shall be available to the EPA on a routine schedule, or in response *to ad hoc* data requests from the TOPO. The EPA PO shall determine the timing and content of deliveries pursuant to the contract Technical Direction Clause. The Contractor shall deliver an electronic replica of the database and all supporting applications to the EPA annually. Documentation of all database objects shall be included within the database.

1.1.2 Data Archiving

The Contractor shall maintain historical archives of CASTNET data from its inception, including primary measurements from continuous monitors, sampling information, analytical results,

laboratory quality assurance data, inter-laboratory comparisons, model results, site locations and configurations, data from special studies, and data from other organizations used in the CASTNET program.

1.1.3 Data Security and Disaster Recovery

The Contractor shall provide for data security and deliver a detailed disaster recovery plan to the COR within 60 calendar days after contract award. The disaster recovery plan shall include all elements of good data management practices, including an effective backup strategy; off-site storage of database backup files, critical software and electronic documents; and an effective data restoration plan that provides for a minimum of data loss in the event of a disaster. The Contractor's Data Security and Disaster Recovery plan(s) will be subject to EPA review and approval upon receipt.

1.1.4 Data Analysis

CASTNET dry deposition fluxes are calculated as a product of measured ambient air concentration values and inferentially-derived deposition velocities. Historically, the Multi-layer Model (MLM) has been used to estimate deposition velocities, accounting for stomatal and boundary layer resistance to deposition at multiple levels in a canopy. Because EPA has discontinued development of the MLM, other Eulerian models such as the Community Multi-scaled Air Quality model (CMAQ) and Comprehensive Air Quality Model with Extensions (CAMx) have been proposed by the deposition science community for providing dry deposition estimates. Currently, EPA is using historical deposition velocities to replace missing or discontinued meteorological parameters. EPA is also using CMAQ to provide estimates of dry deposition from CASTNET measured concentrations. The Contractor shall be capable of running the MLM using existing CASTNET data and historical average deposition velocities. The Contractor shall also be capable of analyzing output from the Eulerian air quality models to provide dry deposition estimates.

The Contractor shall have the technical expertise to perform complex statistical analyses (e.g., principal component, cluster and time series analyses) using a robust statistical analysis package (e.g., SAS, S-plus, and R).

The Contractor shall be technically capable of performing basic geographic and geostatistical analyses such as calculating geographic means and creating interpolations of geographic data sets using Inverse Distance Weighted, Kriging and Co-Variant Kriging algorithms; and producing publication-quality maps from these analyses. The EPA will request that the

Contractor perform geographic and geostatical analyses to report on long-term regional trends as measured by CASTNET.

1.1.5 Data validation

The Contractor shall screen and validate data from continuous field measurements for reasonableness using historical criteria, physical constraints, equipment status or other established and documented criteria. All data shall be screened by the Contractor for data anomalies by applying screening checks for physical maximum, minimum, reasonable boundaries, rate of change, allowable characters or other documented criteria. Any changes to raw data shall be recorded in the database and identified with a data validity code that identifies the circumstance or criteria by which the determination was made that the data is anomalous. All data entered by human data entry by the Contractor (or subcontractor) shall be validated either by independent double entry or statistically defensible means to document a minimum of 99.99 percent data accuracy. The Contractor shall screen, validate, code and submit all data collected in compliance with 40 CFR regulations to the EPA Air Quality System (AQS) database.

1.2 Quality Assurance

Quality Assurance (QA) includes, but is not limited to, those activities conducted by and for the Contractor's management that assure and evaluate the effectiveness and appropriateness of all monitoring-related processes that might affect the quality of data delivered to the EPA under the contract. Typically, QA activities shall ensure that the Quality Control (QC) functions are carried out following the QAPP v8.2 into the operational functions of the work. The Contractor shall periodically evaluate the timeliness, effectiveness, and appropriateness of the QC activities, as outlined and specified in the QAPP v8.2 and EPA QA guidance (i.e. EPA's Quality Assurance Handbook for Air Pollution Measurement Systems).

The QA/QC program shall provide a uniform basis for sample handling, analysis, instrument and/or methods calibration and maintenance, equipment and method acceptance testing, performance evaluation, analytical data gathering, data processing and analysis, and reporting. In many instances where methodologies are available, specific QC procedures shall be incorporated into the method documentation (i.e. Standard Operating Procedures) by the Contractor.

The Contractor shall perform quality assurance activities independent of project management. The Contractor's quality assurance team shall prepare and deliver to the EPA four quarterly

reports within 30 calendar days after the end of the calendar quarter for the base period and each option year of the contract. The quarterly reports will briefly describe and summarize systematic data quality issues identified and remedial actions taken during the quarter. Systematic data quality issues are defined as procedures or equipment within the project that may be introducing unacceptable bias or uncertainty into the data. The Contractor's quality assurance team shall also prepare and deliver to the EPA an annual report summarizing the current quality state of the CASTNET program, as measured by the various quality control indicators identified in the QAPP v.8.2.

1.3 Equipment Depot/Equipment Repair and Maintenance

The Contractor shall purchase new equipment and parts for the on-going operation and enhancement of the network on behalf of the EPA. Equipment and parts shall be delivered to the Contractor's facility or installation sites. Prior to deploying equipment for service, the Contractor shall ensure that field equipment is operating properly by performing and documenting acceptance testing of all the equipment purchased by EPA delivered to the Contractor's facility. Acceptance tests shall include comparisons of instrument outputs to known, calibrated values and checks of zero, span, and drift, noise levels, response time, and detection limits. The Contractor shall notify the EPA TOPO and should return to the manufacturer any equipment that fails acceptance testing.

The Contractor shall ensure sufficient spare parts are on hand to meet or exceed the requirements of this contract and shall purchase spare parts on a periodic basis to ensure sufficient spare parts are available at all times. The Contractor shall be responsible for affixing property tags properly to all EPA-purchased equipment and parts.

The Contractor shall maintain and update a database inventory of all EPA capital equipment. The current equipment inventory is included in Attachment 2. At a minimum, the inventory database shall contain the following fields: equipment description, manufacturer name, model number, serial number, EPA property number, location, purchase price, month and year of purchase, current condition and disposition. For quality assurance purposes, the history of all ozone analyzers and transfer standards shall be traceable using this database. The Contractor shall provide a written report on equipment inventory to EPA annually, and upon request by the PO.

The Contractor shall be responsible for the maintenance and repair (including costs) of all instruments, shelters, and data acquisition systems. Routine maintenance and repair expenses of task-specific equipment and instruments shall be included in the relevant task pricing. The

Contractor shall insure that all equipment is in good working condition, is conducive to a safe work environment and is provided appropriate protection and security. The equipment shall be Government Furnished Property (GFP) or Contractor Furnished Property (CFP). The EPA may require equipment to be upgraded as new techniques, instrumentation, and improved components become available, and may require the replacement of outdated equipment that has reached the end of its operating lifetime. New or replacement equipment shall be government furnished equipment.

1.4 Data Acquisition System

The Contractor shall use an automated data acquisition system (DAS).

1.5 Training (site operators)

The Contractor shall provide standard substantive, hands on training to each new site operator. Training topics shall include, but not be limited to, an overview of the CASTNET program, equipment operation and maintenance, sampling procedures, safety, documentation and quality assurance as described in the QAPP v. 8.2. The Contractor shall evaluate operator performance in these activities, and provide adequate training until the site operator is proficient, in accordance with the data quality objectives described in the QAPP. The Contractor shall maintain the training records for each site operator at the site and at the Contractor's facility.

1.6 Field Calibrations

The Contractor shall visit each active CASTNET monitoring station at least twice per year to perform routine calibration and maintenance of all CASTNET field equipment. The preparation (i.e. maintaining calibration laboratory), data management, and coordination of the field calibrations are included under Task 1. The preparation and travel hours, equipment, and materials necessary to actually perform the calibration shall be included under the relevant Task (e.g., hours to perform trace gas calibrations shall be included under Tasks 8 – 13).

In preparing for site visits, the Contractor shall coordinate with site operators and notify the TOPO of all scheduled site visits no less than 2 weeks prior to the visit. Upon arrival at each monitoring site and before any adjustments are made to any instruments, the Contractor shall conduct and record complete performance checks on all air quality systems, meteorological sensors, and data acquisition systems.

The Contractor shall perform the field calibrations listed in Table 2-5 Acceptance Criteria for CASTNET Field Calibrations included in the CASTNET QAPP v. 8.2 at each site using the specified method, or an equivalent or better method that meets the acceptance criteria. The Contractor shall operate all data collection activities in accordance with the quality assurance documentation described in section 1.2 of this SOW (i.e QAPP v.8.2, 40 CFR Part 50, EPA's Quality Assurance Handbook for Air Pollution Measurement Systems).

1.9 Third Party Audits

The Contractor shall provide State and local agencies with access to CASTNET sites for the purpose of audits, installation of data loggers or installation and operation of additional monitoring equipment as space permits. EPA requests that any agency that plans to perform an audit contact the EPA CASTNET program manager and the CASTNET contractor. The contractor may work with the site operator for site access. It is estimated that no more than 50 EPA managed CASTNET sites will be visited by State or local agencies per year.

1.10 Laboratory Accreditation Requirements

The Contractor's proposed laboratory methods shall comply with EPA's policies on measurement competency under acquisition agreements during the performance of the contract.

The Contractor must be accredited by a nationally recognized organization for the analytical procedures listed in Table 3 to meet EPA's requirements for CASTNET. The Contractor must participate in inter-laboratory comparison programs for the analytical measurements listed in Table 3. The inter-laboratory comparison programs must submit samples at concentrations similar to the CASTNET measurement levels (trace). The results of these inter-laboratory comparisons will be evaluated during the laboratory accreditation/renewal.

Table 3 Laboratory accreditation requirements for CASTNET

Test	Test Method	SOP
Determination of Inorganic Anions by Ion Chromatography (IC)	EPA 300.0 (modified)	GLM3180-001
Determination of Ammonia/Ammonium by Automated Colorimetry (AC)	EPA 350.1 (modified)	GLM3180-004

Determination of Inorganic Cations by ICP Optical Emission Spectrometry (ICP-OES)	EPA 6010B (modified)	GLM3180-005
Determination of Hydrogen Ion (pH)	EPA 150.1	GLM3180-007
Determination of Specific Conductance	EPA 120.1	GLM3180-008
Determination of Particulate Matter Mass (PM2.5 – PM10)	EPA Quality Assurance Guidance 2.12 40 CFR Part 50, Appendix L	GLM3180-002
Determination of Particulate Matter for High Volume Filters (PM10)	EPA Quality Assurance Guidance 2.11 40 CFR Part 50, Appendix J	GLM3180-006

The Contractor's accreditation shall be maintained (active) for the entire contract period of performance. The Contractor shall notify the CO and the PO prior to any lapse in accreditation for any of the required analyses. If there is a lapse, the PO will determine how to address any impacts to the scope of work being performed under the contract.

Task 2: Dry Deposition Filter pack with an operator

The Contractor shall be responsible for the operation of a 3-stage filter pack to collected particles and gases at a site. Particles and selected gases shall be collected by passing air at controlled flow rates through a sequence of Teflon®, nylon, and base-impregnated filters. The Contractor shall perform filter pack sampling 10-meters above ground surface using a tilt-down tower. Filter pack flow shall be maintained with mass flow controllers at standard conditions of 25°C and 101.33 k Pascal (760 mmHg). Flow shall be maintained at 1.5 liters per minute (LPM) at sites having higher concentrations of analytes (generally sites in the Eastern U.S.) and 3.0 LPM at sites having lower concentrations (generally sites in the Western U.S.) or at other flow rates upon technical direction from the TOPO. Filter packs shall be replaced at each site every Tuesday at approximately 0900 hours by a site operator employed by the Contractor or as a subcontractor. In order to calculate the flow rate, the Contractor shall make continuous 9-m temperature measurements at each filter pack site. The temperature measurements shall be stored by the Contractor as hourly averages.

Under this task, the Contractor shall perform semi-annual field calibrations on the flow system, data acquisition system and 9-m temperature probe. During each field calibration, 'as found' and 'as left' values shall be recorded in the database.

SOPs and the CASTNET QAPP describing filter pack operations are available at http://www.epa.gov/castnet.

Task 3: Dry Deposition Filter pack without an operator

The Contractor shall operate a dry deposition filter pack as described in Task 2, except under Task 3 the operator will provide independent support to the network (i.e. EPA will not pay for site operator support. The site operator will be supported by an outside agency or organization). Under this task the operator may be a government employee where their time and support is covered by another agency.

Task 4: Ozone Monitoring with operator

The Contractor shall operate an ozone analyzer and on-site transfer standard in accordance with 40 CFR Parts 50, 53 and 58; the guidance in "Quality Assurance Handbook for Air Pollution Measurement Systems", Volumes I, and II (http://www3.epa.gov/ttn/amtic/qalist.html); "Transfer Standards for Calibration of Air Monitoring Analyzers for Ozone" (EPA-600/4-79-056); and "Technical Assistance Document for the Calibration of Ambient Ozone Monitors" (EPA-600/4-79-057) (http://www3.epa.gov/ttn/amtic/cpreldoc.html). Daily zero, span and precision check shall be performed by the Contractor to verify data meeting the acceptance criteria. See Table 4-12 in the CASTNET QAPP v 8.2 for CASTNET ozone acceptance criteria.

Under this Task, the Contractor is responsible for maintaining shelter temperature in accordance with 40 CFR Part 58. The Contractor shall perform field calibrations of the ozone analyzer, on-site ozone transfer standard, and shelter temperature probe bi-annually (every 6-months). Under this Task, the site operator will be a employee of the Contractor or subcontractor for the Contractor.

The Contractor shall be responsible for submitting regulatory compliant hourly ozone data and 1-point precision checks to AQS quarterly.

SOPs and the CASTNET QAPP describing CASTNET ozone monitoring are available at http://www.epa.gov/castnet.

Task 5: Ozone Monitoring without operator

The Contractor shall operate an ozone monitor as described in Task 4, except under Task 5 the operator will provide independent support to the network (i.e. EPA will not pay for site operator support. The site operator will be supported by an outside agency or organization).

Task 6: Meteorology with an operator

Wind speed, wind direction, 2 meter temperature, relative humidity, solar radiation, precipitation and surface wetness measurements shall be made by the contractor in accordance with the "Quality Assurance Handbook for Air Pollution Measurement Systems Volume IV: Meteorological Measurements Version 2.0 (EPA-454/B-08-002) available at http://www3.epa.gov/ttn/amtic/qalist.html".

Under this Task the site operator will be provided by the Contractor. Data shall be polled and stored as hourly averages in the database by the Contractor. Level I data shall be delivered to the EPA by the Contractor no more than 12 hours after data collection ends each day.

The calibration of each of the meteorological sensors shall be included under this Task. Sensors shall be calibrated twice per year by the Contractor using the acceptance criteria in Table 2-5 (Acceptance Criteria for CASTNET Field Calibrations) in the CASTNET QAPP v. 8.2. SOPs and the CASTNET QAPP describing the operation of the meteorological sensors are available at http://www.epa.gov/castnet.

Task 7: Meteorology without an operator

The Contractor shall operate a suite of meteorology sensors as described in Task 6, except under Task 7 the operator will provide independent support to the network (i.e. EPA will not pay for site operator support. The site operator will be supported by an outside agency or organization).

Task 8: Continuous NOy/NO with an operator

The Contractor shall operate a NOy/NO analyzer according to the manufacturer's manual and recommendation. The operation shall be consistent with 40 CFR Parts 50, 53 and 58, the "Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II (EPA-545/B-13-003)" and the "Technical Assistance Document (TAD) for Precursor Gas Measurements in

the NCore Multi-pollutant Monitoring Network" (EPA-454/R-05-003) available at http://www.epa.gov/ttn/amtic/ncore/guidance/tadversion4.pdf.

Under this task the site operator will be provided by the Contractor. The Contractor is responsible for maintaining shelter temperature in accordance with 40 CFR Part 58. The Contractor shall perform field calibrations of the NOy analyzer and shelter temperature probe quarterly. Acceptance criteria for the NOy analyzer can be found in Table 6 of the CASTNET QAPP v. 8.2 Appendix 11.

The Contractor shall be responsible for submitting regulatory compliant NOy data and QC results to AQS quarterly.

SOPs and the CASTNET QAPP describing NO/NOy operations are available at http://www.epa.gov/castnet.

Task 9: Continuous NOy/NO without an operator

The Contractor shall operate a continuous trace gas NO/NOy analyzer as described in Task 8, except under Task 9 the operator will provide independent support to the network (i.e. EPA will not pay for site operator support. The site operator will be supported by an outside agency or organization).

Task 10: Continuous SO_2 with an operator

The Contractor shall operate a SO_2 analyzer according to the manufacturer's manual and recommendation. The operation shall be consistent with 40 CFR Parts 50, 53 and 58, the "Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II (EPA-545/B-13-003)" and the "Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-pollutant Monitoring Network" (EPA-454/R-05-003) available at http://www.epa.gov/ttn/amtic/ncore/guidance/tadversion4.pdf.

Under this Task the site operator will be provided by the Contractor. The Contractor is responsible for maintaining shelter temperature in accordance with 40 CFR Part 58. The Contractor shall perform field calibrations of the SO_2 analyzer, MFC calibrator and shelter temperature probe quarterly. Acceptance criteria for the SO_2 analyzer can be found in Table 6 of the CASTNET QAPP v. 8.2 Appendix 11.

The Contractor shall be responsible for submitting regulatory compliant SO_2 data and QC results to AQS quarterly.

SOPs and the CASTNET QAPP describing SO_2 operations are available at http://www.epa.gov/castnet.

Task 11: Continuous SO_2 without an operator

The Contractor shall operate a continuous trace gas SO_2 analyzer as described in Task 10, except under Task 11 the operator will provide independent support to the network (i.e. EPA will not pay for site operator support. The site operator will be supported by an outside agency or organization).

Task 12: Continuous CO with an operator

The Contractor shall operate a CO analyzer according to the manufacturer's manual and recommendation. The operation shall be consistent with 40 CFR Parts 50, 53 and 58, the "Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II (EPA-545/B-13-003)" and the "Technical Assistance Document (TAD) for Precursor Gas Measurements in the NCore Multi-pollutant Monitoring Network" (EPA-454/R-05-003) available at http://www.epa.gov/ttn/amtic/ncore/guidance/tadversion4.pdf.

Under this Task the site operator will be provided by the Contractor. The Contractor is responsible for maintaining shelter temperature in accordance with 40 CFR Part 58. The Contractor shall perform field calibrations of the CO analyzer, MFC calibrator and shelter temperature probe quarterly. Acceptance criteria for the CO analyzer can be found in Table 6 of the CASTNET QAPP v. 8.2 Appendix 11.

The Contractor shall be responsible for submitting regulatory compliant CO data and QC results to AQS quarterly.

SOPs and the CASTNET QAPP describing CO operations are available at http://www.epa.gov/castnet.

Task 13: Continuous CO without an operator

The Contractor shall operate a continuous trace gas CO analyzer as described in Task 12, except under Task 13 the operator will provide independent support to the network (i.e. EPA will not pay for site operator support. The site operator will be supported by an outside agency or organization).

Task 14: Filter Media Analysis

The Contractor shall be responsible for providing sample preparation and analytical services for two types of samples: 1) sample filters, and 2) precipitation samples for inter-laboratory comparisons (Task 15). The Contractor shall maintain the technical capability to perform the required sample preparation and analytical services required and provide an acceptable level of personnel, equipment, and support systems (i.e. deionized water system). The Contractor's responsibilities shall include, but not be limited to, the following:

- Purchasing, maintenance, and pre-sampling treatment of all required filter media;
- Appropriate shipping containers and shipment of all filter media to the field, including field blanks;
- Analysis of all samples, laboratory quality control samples, blanks, calibration standards, filter production-lot acceptance testing and performance evaluation samples;
- All sampling and analysis data entry;
- Purchase and maintenance of laboratory instruments and consumable supplies; and
- Storage and archival of all sample extracts and filter media.

The following filters and parts are used for the filter pack assembly:

- A 47 mm PTFE (polypropylene backed) membrane Teflon filter with a 1.0 µm pore size is manufactured by Whatman® (catalog number 7590 004).
- A 47 mm Nylon membrane NylasorbTM filter with a 1.0 µm pore size is manufactured by PALL Life Sciences (P/N 66509).
- A 47 mm cellulose Whatman® ashless paper filter is manufactured by Whatman (catalog number 1441 047) and identified with a 41 on the box.

The estimated number of samples that may be analyzed for the base year and each of the four option years is provided in Appendix 3.

14.1 Media Acceptance

The Contractor shall be responsible for the purchase and preparation of all filter media. Each three-stage filter pack shall contain a Teflon® filter, a nylon filter, and two base-impregnated cellulose Whatman® filters. The Contractor shall be responsible for impregnating the cellulose filter with potassium carbonate. Upon direction by the PO, the Contractor shall coordinate the purchase of filter media with other monitoring networks to ensure consistency in sample results.

The Contractor shall perform extraction and analysis acceptance tests on all filters before assembly. The Contractor shall perform acceptance testing on a sufficient number of filters from each type of filter box to determine with 95 percent confidence that analyte contamination for the box of filters does not exceed 2 times the method detection limit. Laboratory blank samples shall be prepared by the Contractor as the filter packs are prepared. In addition, filter blank samples shall be sent to the field by the Contractor quarterly in order to evaluate the effects of preparation and shipping on sample media.

14.2 Filter pack Preparation and Analysis

Prior to loading of filters, each three-stage filter pack assembly shall be cleaned with deionized water, oven-dried, assembled and inspected for damage by the Contractor. The Contractor shall ship filter packs to field sites for sampling. Filters shall not be used more than 30 days after preparation.

After sampling in the field, filter packs shall be shipped from the field sites to the Contractor and disassembled for extraction and analysis by the Contractor. The Contractor shall extract all filters using methods that produce extraction efficiencies comparable to historical CASTNET filter extraction methods. Sample extracts shall be stored at 4 degrees Celsius for at least 8 hours prior to analysis.

The Contractor shall analyze filter media for anions (SO_4^{2-} and NO_3^-), base cations (Na^+, Ca^{2+}, K^+, and Mg^{2+}) and ammonium (NH_4^+). Each sample shall be analyzed for the complete set of analytes. The Contractor shall analyze filter extracts using the methods specified in the CASTNET QAPP v. 8.2 Table 3-2 or an equivalent or better method which has been approved by the EPA.

14.3 Sample Management

After field sampling is complete, samples shall be sent back to the Contractor's laboratory where they shall be received, labeled, and inspected for damage. Samples shall be stored by the Contractor at 4°C before and after analysis. Extracts shall be stored for a minimum of two years after the collection of the sample. The Contractor shall track and manage samples using an automated tracking system such as bar codes or optical character recognition.

The Contractor shall use a laboratory information management system (LIMS) for automatic data acquisition, efficient sample tracking and laboratory data management to the fullest extent practicable. The Contractor shall use an automated data acquisition system or provide for and document a minimum 99.99 percent data accuracy of manually entered data for all laboratory data acquisition. All data entered by manual data entry shall be validated either by independent double entry or statistically defensible means to document the minimum data accuracy.

14.4 Laboratory Quality Assurance

In order to maintain an acceptable quality of data and to establish estimates of accuracy and precision, the Contractor shall have quality assurance procedures for laboratory analysis in place. The Contractor shall randomly replicate 5% of the samples within an analysis to assess precision.

The Contractor shall analyze the following quality control standards:

- A NIST-traceable Calibration Verification Standard produced by an independent lab shall be run after every 10 environmental samples and at the end of the batch to track instrument drift;
- A NIST-traceable reference standard produced by an independent lab shall be analyzed at the beginning and end of each run to assess accuracy;
- One method blank shall be analyzed with each extraction; and
- For Ion Chromatography analyses, internal injection standards shall be prepared to assess shifts in retention time and sample injection volume.

The Contractor shall be generate calibration curves for all analyses, and all samples must fall within range of the calibration curve. Quality control standards, calibration curves, sample replicates, and filter blanks must meet the specified acceptance criteria (See the CASTNET QAPP v. 8.2 Table 3-4). The Contractor shall document in the Quality Assurance Project Plan corrective actions for samples that do not meet these acceptance criteria. Quality assurance analyses shall be reported to the EPA by the Contractor quarterly using accepted laboratory methods for aggregating and calculating statistics.

To minimize the occurrence of instrument failure and system malfunctions, the Contractor shall be responsible for instrument calibration, inspection, testing, and maintenance including, but not limited to, lubrication of pumps, prevention of instrument leaks, and maintenance and replacement of valves and fittings.

14.5 Laboratory Accreditation

The Contractor's proposed laboratory shall comply with EPA's policies on measurement competency under acquisition agreements (http://www.epa.gov/measurements/ensuring-measurement-competency). See section 1.10 of this SOW for more information.

Task 15: Inter-laboratory Comparison Samples

The Contractor shall analyze precipitation and natural water laboratory inter-comparison samples for anions (SO_4^{2-} and NO_3^-), base cations (Na^+, Ca^{2+}, K^+, and Mg^{2+}), ammonium (NH_4^+), and pH using the methods specified in the CASTNET QAPP v. 8.2 Table 3-2. Each sample shall be analyzed for the complete set of analytes by the Contractor. Inter-laboratory comparison studies are necessary for the documentation of laboratory performance and coordination of results with other North American monitoring networks, including the Interagency Monitoring of Protected Visual Environments (IMPROVE) Network, the Canadian Acid Precipitation Monitoring Network (CAPMoN), and the National Atmospheric Deposition Program (NADP).

Task 16: Operation of NADP Ammonia Monitoring Site Co-located with CASTNET

The NADP is structured as a cooperative program that represents coordinated efforts of many interested individuals and organizations to operate monitoring sites, report data, and oversee research activities related to atmospheric deposition. For more information on NADP, visit: http://nadp.isws.illinois.edu.

Each NADP site has a sponsoring agency and an operating agency. For some sites the sponsoring and operating agencies may be the same. Site sponsors and operating participants are responsible for ensuring that the equipment, facilities, materials, resources, and people are available to operate and maintain the site. Uniformity is essential to obtain data on how the chemical climate in the nation's ecological regions is changing over seasons, years, and even decades. This helps ensure the data are geographically representative and comparable from site to site and are an essential part of any long-term environmental monitoring network. Sites must conform to fixed site selection and installation criteria and follow standard procedures for

collecting, handling, and measuring samples (NADP 2003). The EPA currently sponsors and provides operational support for several NADP network sites as well as supports a quality assurance program. The program provides information on the conditions of each site and helps determine if site equipment is functioning properly and samples collection and data provided by the site operators are in conformance with NADP standard operating procedures.

16.1 Purpose

The primary purpose of Task 16 is to provide site operation and maintenance of EPA-sponsored NADP/AMoN sites collocated with CASTNET sites (Appendix 4).

The site operator has primary responsibility for bi-weekly sample change-outs, sample documentation, sample shipments and maintenance of the site (e.g., maintaining NADP local siting criteria). Excluding travel to the site, site operators generally spend 30 minutes performing the required bi-weekly (every other Tuesday) duties.

Site Operator responsibilities include:

- Travel to the site every other Tuesday.
- Collect AMoN sampler(s) from rain shelter and record any observations on the field form.
- Install a new sampler(s) in the rain shelter.
- Ship the sampler and field observation form back to the Central Analytical Laboratory (CAL) in the prepared shipping container.

16.2 Site Operation Support

Site operation and maintenance tasks associated with operating AMoN sites listed in Appendix 4 will be provided by the Contractor under this Task.

The Contractor shall ensure that an available and trained site operator is performing the site operator duties as specified in the NADP Site Operation Manual (NADP 1999-01). This also includes identifying a designated back-up site operator for each site in the event the primary site operator is not available.

Task 17: Operation of NADP/NTN Site Co-located with CASTNET

17.1 Purpose

The primary purpose of Task 17 is to provide site operation and maintenance of EPA-sponsored NADP/National Trends Network (NTN) sites co-located with CASTNET sites (Appendix 4).

The site operator has primary responsibility for monitoring equipment operation and maintenance, physical maintenance of the site (e.g., maintaining NADP local siting criteria), weekly collection and measurement of samples, sample documentation, and submission of samples and documentation to the Central Analytical Laboratory (CAL). One or more observers may assist the site operator in these responsibilities (i.e. a backup site operator). Excluding travel to the site, site operators generally spend about 2 hours performing the required weekly (every Tuesday) duties. Through their diligence to these duties, site operators are largely responsible for determining the quality of NADP data.

Precipitation is measured using a NOAH IV digital rain gage at all NTN sites included under this task.

Site Operator responsibilities include:

- Travel to the field site and inspect the site and equipment every Tuesday.
- Collect the wet side bucket from the collector and download e-gage data every Tuesday.
- Clean collector bucket for the next sample every Tuesday.
- Perform routine equipment maintenance or repairs as needed or prescribed.
- Transport the bucket to the field laboratory.
- Weigh the bucket and transfer the sample it contains to a sample bottle.
- For samples of 70 grams or more, remove a portion from the sample bottle to measure sample pH and conductivity.
- Transfer e-gage data to CAL within 48 hours.
- Perform occasional special maintenance or quality assurance tasks in cooperation with the CAL or other agencies.
- Contact the CAL with any questions about equipment or procedures.

In addition, the NADP Program Office sponsors an annual Field Operations Training Course for new and existing site operators. These trainings are web-based and do not require Contractor support.

Occasional non-routine visits by the site operator, and the costs of shipping (sample and document transfer) shall be included in this Task.

17.2 Site Operation Support

Site operation and maintenance tasks associated with operating the NADP/NTN sites listed in Appendix 4 will be provided by the Contractor under this Task.

The Contractor shall ensure that an available and trained site operator is performing the site operator duties as specified in the NADP Site Operation Manual (NADP 1999-01). This also includes identifying a designated back-up site operator for each site in the event the primary site operator is not available. In addition, shipping costs associated with sample and documentation transfer to the NADP Program Office shall be covered by the Contractor for the EPA-sponsored NADP sites both independent and co-located with CASTNET sites. The Contractor shall assume one 2-day site visit if circumstances arise where travel to the site is necessary (i.e. repair trip outside the normal schedule).

17.3 NADP Siting Criteria Problems

The Contractor shall be responsible for resolving siting criteria issues, as practical, that are identified by the NADP Program Office's Quality Assurance Manager or the Work Assignment COR. The Contractor shall assume 3 trips to EPA-sponsored sites will be necessary for each year to resolve siting criteria issues. The Contractor shall work with the site operator to resolve the issues and notify the EPA TOPO when the issue(s) have been resolved.

Task 18: Operation of NADP/NTN Site Not Co-located with CASTNET

Under Task 18, the Contractor shall provide support for the operation of an NADP/NTN site as described in Task 17, expect under Task 18 the NADP/NTN site will not be co-located with an existing CASTNET site. As stated in Task 17, the Contractor shall provide site operation support, including maintenance and training, and shall be responsible for resolving siting criteria problems at NADP/NTN sites not co-located with CASTNET.

Task 19: Operation of IMPROVE Sites Co-located with CASTNET

The Interagency Monitoring of Protected Visual Environments (IMPROVE) program is a cooperative air quality monitoring effort governed by a steering committee composed of representatives from Federal Agencies: the Environmental Protection Agency, the National Oceanic and Atmospheric Administration, and the four federal land managers – the National Park Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the Bureau of Land Management. In addition to the federal representatives the steering committee is comprised of regional organizations and state agencies and an associate member, the State of Arizona Department of Environmental Quality. The IMPROVE monitoring program was

established in 1985 to aid in the creation of federal and state implementation plans for the protection of visibility in Class I areas as stipulated by the 1977 Clean Air Act Amendments. The monitoring network consists of (as of June 2011) 170 sites. Quality data collection begins with those who operate, service, and maintain monitoring instrumentation. Therefore, it is important to have trained site operators to ensure that the monitoring station is functioning properly and IMPROVE standard operating procedures (SOPs) are followed.

The primary purpose of Task 19 is to provide for the operation and maintenance associated with maintaining two IMPROVE-protocol monitoring sites. In addition, occasional non-routine visits by the site operator, certain utilities shall be included in this task. The site operator has primary responsibility for monitoring equipment operation and overall site maintenance (e.g., ensuring adherence with IMPROVE siting criteria), weekly collection and measurement of samples, sample documentation, and handling (submission of samples and documentation to the central laboratory). One or more observers (i.e. backup site operators) may assist the site operator in these responsibilities. Excluding travel to the site, site operators generally spend about 2 hours performing their weekly duties under normal operating conditions. Through their diligence to these duties, site operators are largely responsible for determining the quality of IMPROVE data.

The Contractor shall be responsible for providing the necessary site operator support associated with maintaining the two IMPROVE monitoring stations listed in Appendix 5. This support may include tasks such as managing utilities (i.e., telephone or electric), land leases, occasional non-routine visits required by the site operator, and shipping associated with sample, equipment, or documentation transfers. The Contractor shall ensure that an available and trained site operator is performing the site operator duties specified in the appropriate IMPROVE Site Operation Manuals. This also includes identifying a designated back-up site operator for each site in the event the primary site operator is not available. The Contractor shall also communicate with the site operator weekly on Tuesdays to report on site operation and sample collection. The Contractor shall assume one or two site visits if circumstances arise where travel to the site is necessary (i.e. a trip to resolve siting criteria issues).

Task 20: Acquisition and Management of CASTNET Partner (NPS, BLM-WSO) Data

The Contractor shall manage data and coordinate network activities for the CASTNET sites operated by NPS, BLM-WSO and any other partner operating a CASTNET site. This includes working with the partner agencies to perform routine database quality control checks to verify the CASTNET database has the most current (valid) data from the partner agencies.

Task 21: Operation of a $PM_{2.5}$ FRM Speciation Sampler

The Contractor shall collect data from a 24-hour integrated $PM_{2.5}$ Speciation sampler according to the manufacturer's manual and recommendations. The Contractor shall provide measurements consistent with 40 CFR Part 58 and the Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II (EPA-545/B-13-003)" and "CSN QAPP: PM2.5 Chemical Speciation Sampling at Trends, NCore, Supplemental and Tribal Sites (EPA-454/B-12-003)".

Task 22: Level of Effort/Special Studies

In addition to the Tasks described above, the Contractor shall: provide extraneous infrastructure costs for sites (i.e. telemetry, land leases, site repairs); design, test and deploy new monitoring methods and technology for use at CASTNET sites; conduct non-routine monitoring activities; perform special studies or analyses associated with CASTNET; as directed in task orders issued by the EPA Contracting Officer (CO). Examples of these activities include:

- Management of the site utilities, telemetry (e.g., phone or internet service) and the site land leases;
- Travel to EPA management and scientific meetings;
- Operate or collaborate with (e.g., collect samples at, analyze samples for, or make CASTNET facilities available to) other integrated research monitoring programs, such as the NADP, IMPROVE or other monitoring networks approved by EPA;
- Deployment and operation of gaseous ammonia and/or NOy/NOx monitoring devices;
- Deployment and operation of denuder-filterpack monitoring devices;
- Deployment and operation of ambient methane monitoring devices;
- Deployment and operation of gaseous and particulate mercury monitoring equipment;
- Operate and maintain instruments for direct measurement of dry deposition or surface fluxes of ozone, sulfur dioxide, carbon dioxide, ammonia, nitric acid by relaxed eddy correlation or gradient methods;
- Assist in air quality or deposition model development and programming for CASTNET;
- Design and analysis of air quality databases and novel data acquisition systems for use by CASTNET;
- Design and develop java webpages for the EPA CASTNET website;
- Recommend, evaluate and install equipment at candidate monitoring sites according to network requirements and criteria;
- Provide training and conduct workshops to State, Local, and Tribal personnel on air monitoring techniques and procedures;
- Install and operate soil monitoring equipment and institute procedures for critical loads assessments and validation;

- Prepare *ad hoc* summaries of data, associated data quality information, and statistical analyses of data for temporal or spatial trends.

Appendix 1. Active CASTNET Monitoring Stations

Table of Active CASTNET sites (January 2016)

ABT147	Abington	CT	41.8402	-72.01	EPA
ACA416	Acadia NP	ME	44.3769	-68.2608	NPS
ALC188	Alabama-Coushatta	TX	30.7017	-94.6742	EPA
ALH157	Alhambra	IL	38.869	-89.6228	EPA
ANA115	Ann Arbor	MI	42.4165	-83.902	EPA
ARE128	Arendtsville	PA	39.9231	-77.3078	EPA
ASH135	Ashland	ME	46.6041	-68.4135	EPA
BAS601	Basin	WY	44.28	-108.041	BLM
BBE401	Big Bend NP	TX	29.3022	-103.177	NPS
BEL116	Beltsville	MD	39.0284	-76.8171	EPA
BFT142	Beaufort	NC	34.8848	-76.6203	EPA
BUF603	Buffalo	WY	44.1442	-106.109	BLM
BVL130	Bondville	IL	40.0518	-88.3723	EPA
BWR139	Blackwater NWR	MD	38.445	-76.1114	EPA
CAD150	Caddo Valley	AR	34.1795	-93.0988	EPA
CAN407	Canyonlands NP	UT	38.4586	-109.821	NPS
CAT175	Claryville	NY	41.9422	-74.5519	EPA
CDR119	Cedar Creek	WV	38.8795	-80.8477	EPA
CDZ171	Cadiz	KY	36.7841	-87.8499	EPA
CHA467	Chiricahua NM	AZ	32.0092	-109.389	NPS
CHE185	Cherokee Nation	OK	35.7507	-94.67	EPA
CKT136	Crockett	KY	37.9214	-83.0662	EPA
CND125	Candor	NC	35.2632	-79.8365	EPA
CNT169	Centennial	WY	41.3642	-106.24	EPA
COW005	Coweeta Screwdriver Knob	NC	35.0469	-83.4531	EPA
COW137	Coweeta	NC	35.0608	-83.4306	EPA
CTH110	Connecticut Hill	NY	42.4006	-76.6538	EPA
CVL151	Coffeeville	MS	34.0026	-89.799	EPA
DCP114	Deer Creek	OH	39.6359	-83.2605	EPA
DEN417	Denali NP	AK	63.7258	-148.963	NPS
DIN431	Dinosaur NM	UT	40.4373	-109.305	NPS
EGB181	Egbert	ON	44.232	-79.7812	EPA
ESP127	Edgar Evins	TN	36.0388	-85.7331	EPA
EVE419	Everglades NP	FL	25.3911	-80.6806	NPS
FOR605	Fortification Creek	WY	44.3395	-105.92	BLM
GAS153	Georgia Station	GA	33.1787	-84.4052	EPA

GLR468	Glacier NP	MT	48.5103	-113.996	NPS
GRB411	Great Basin NP	NV	39.0053	-114.216	NPS
GRC474	Grand Canyon NP	AZ	36.0597	-112.182	NPS
GRS420	Great Smoky NP - Look Rock	TN	35.6331	-83.9422	NPS
GTH161	Gothic	CO	38.9564	-106.986	EPA
HOW191	Howland Ameriflux	ME	45.2041	-68.7402	EPA
HOX148	Hoxeyville	MI	44.1809	-85.739	EPA
HWF187	Huntington Wildlife Forest	NY	43.9731	-74.2231	EPA
IRL141	Indian River Lagoon	FL	27.8492	-80.4554	EPA
JOT403	Joshua Tree NP	CA	34.0714	-116.391	NPS
KEF112	Kane Exp. Forest	PA	41.598	-78.7674	EPA
KIC003	Kickapoo	KS	39.76039	-95.6359	EPA
KNZ184	Konza Prairie	KS	39.1021	-96.6096	EPA
LAV410	Lassen Volcanic NP	CA	40.5403	-121.576	NPS
LRL117	Laurel Hill	PA	39.9878	-79.2515	EPA
MAC426	Mammoth Cave NP	KY	37.1313	-86.148	NPS
MCK131	Mackville	KY	37.7046	-85.0485	EPA
MCK231	Mackville Collocated	KY	37.7046	-85.0485	EPA
MEV405	Mesa Verde NP	CO	37.1983	-108.49	NPS
MKG113	M.K. Goddard	PA	41.4271	-80.1451	EPA
NEC602	Newcastle	WY	43.873	-104.192	BLM
NIC001	Nicks Lake	NY	43.6805	-74.9891	EPA
NPT006	Nez Perce	ID	46.2756	-116.0216	EPA
OXF122	Oxford	OH	39.5327	-84.7286	EPA
PAL190	Palo Duro	TX	34.8803	-101.665	EPA
PAR107	Parsons	WV	39.0905	-79.6617	EPA
PED108	Prince Edward	VA	37.1655	-78.3069	EPA
PET427	Petrified Forest	AZ	34.8225	-109.892	NPS
PIN414	Pinnacles NM	CA	36.485	-121.156	NPS
PND165	Pinedale	WY	42.9288	-109.788	EPA
PNF126	Cranberry	NC	36.1058	-82.0454	EPA
PRK134	Perkinstown	WI	45.2066	-90.5969	EPA
PSU106	Penn State	PA	40.7208	-77.9319	EPA
QAK172	Quaker City	OH	39.9428	-81.3373	EPA
RED004	Red Lake Nation	MN	47.8636	-94.8358	EPA
ROM206	Rocky Mtn NP Collocated	CO	40.2778	-105.545	EPA
ROM406	Rocky Mtn NP	CO	40.2778	-105.545	NPS
SAL133	Salamonie Reservoir	IN	40.816	-85.6611	EPA
SAN189	Santee Sioux	NE	42.8292	-97.854	EPA
SEK430	Sequoia NP - Ash Mountain	CA	36.4894	-118.823	NPS
SHE604	Sheridan	WY	44.93	-106.85	BLM

SHN418	Shenandoah NP - Big Meadows	VA	38.5231	-78.4347	NPS
SND152	Sand Mountain	AL	34.2888	-85.9698	EPA
SPD111	Speedwell	TN	36.47	-83.8268	EPA
STK138	Stockton	IL	42.2869	-89.9997	EPA
SUM156	Sumatra	FL	30.1103	-84.9903	EPA
THR422	Theodore Roosevelt NP	ND	46.8947	-103.378	NPS
UND002	Underhill	VT	44.5283	-72.8688	EPA
UVL124	Unionville	MI	43.6138	-83.3591	EPA
VIN140	Vincennes	IN	38.7408	-87.4853	EPA
VOY413	Voyageurs NP	MN	48.4128	-92.8292	NPS
VPI120	Horton Station	VA	37.3297	-80.5578	EPA
WFM105	Whiteface Mountain	NY	44.39	-73.86	EPA
WNC429	Wind Cave NP	SD	43.5578	-103.484	NPS
WSP144	Wash. Crossing	NJ	40.3125	-74.8729	EPA
WST109	Woodstock	NH	43.945	-71.7008	EPA
YEL408	Yellowstone NP	WY	44.5597	-110.401	NPS
YOS404	Yosemite NP - Turtleback Dome	CA	37.7133	-119.706	NPS

Appendix 2. List of pollutant monitoring and meteorological measurement systems deployed at a typical EPA CASTNET dry deposition site

Ozone Analyzer	Thermo Scientific Model 49i ozone analyzer (without O_3 generator) and Thermo Scientific 49i ozone transfer standard (with O_3 generator)	Measures continuous ambient O_3 concentrations integrated over a hourly period
3 Stage Filter Pack	Sequence of Filters: Teflon®, nylon, and potassium carbonate- impregnated Whatman®	Collects ambient concentrations of particulate SO_4^{2-}, NO_3^-, NH_4^+, Cl^-, base cations, and gaseous SO_2 and HNO_3 integrated over weekly periods
Flow Control	Teledyne Hastings or Tylan Mass Flow Controllers	Maintains constant sample flow
Data Acquisition	Campbell Scientific CR3000	Records data for select continuous measurement parameters
Temperature (9 m)	R.M. Young temperature sensors	Used to calculate ambient concentrations from the filter pack
Temperature (2m)	R.M. Young temperature sensors	Used to calculate delta temperature between 2 and 9 m
Shelter Temperature	Campbell Scientific model 107 temperature probes	Continuous shelter temperature readings for 40 CFR Part 58 compliance monitoring
Wind Speed and Direction	Climatronics 3-cup anemometer or R.M. Young Wind Monitor and Climatronics F460 vane and translator or R.M. Young Wind Monitor	Special studies, model development and evaluation
Relative Humidity	Climatronics model 100098 or Rotronics MP-100F humidity temperature probe	Special studies, model development and evaluation
Solar Radiation	LI-COR pyranometer, silicon photovoltaic sensor with R.M. Young or Climatronics translator	Special studies, model development and evaluation
Surface Wetness	R.M. Young wetness sensor	Special studies, model development and evaluation

Precipitation	Climatronics 8-inch heated tipping bucket rain gauge	Special studies, model development and evaluation
NOy	API Model T200U	Measures continuous trace level NOy/NO concentrations integrated over an hourly period
Zero Air System	API Model 701H	Provides zero air for daily QC checks and quarterly field calibrations
Gas Calibrator	API Model T700U	Provides calibration standards for multipoint span and zero checks
SO_2	API Model T100U	Measures continuous trace level SO_2 concentrations integrated over an hourly period
CO	API Model T300U	Measures continuous trace level CO concentrations integrated over an hourly period

Appendix 3. Estimated units for each Task for each option period

1	Core operations	12	12	12	12	12
2	Dry deposition filter pack with operator	612	612	612	612	612
3	Dry deposition filter pack without operator	96	96	96	96	96
4	Ozone monitoring with operator	588	588	588	588	588
5	Ozone monitoring without operator	24	24	24	24	24
6	Meteorology with operator	36	36	36	36	36
7	Meteorology without operator	12	12	12	12	12
8	Trace gas NO/NOy with operator	60	60	60	60	60
9	Trace gas NO/NOy without operator	12	12	12	12	12
10	Trace gas SO_2 with operator	24	24	24	24	24
11	Trace gas SO_2 without operator	0	0	0	0	0
12	Trace gas CO with operator	12	12	12	12	12
13	Trace gas CO without operator	0	0	0	0	0
14	Filter media analysis	3,400	3,400	3,400	3,400	3,400
15	Artificial precipitation audit samples	15	15	15	15	15
16	Operation of an NADP AMoN site co-located with CASTNET	600	600	600	600	600
17	Operation of an NADP NTN site co-located with CASTNET	204	204	204	204	204
18	Operation of an NADP NTN site not co-located with CASTNET	72	72	72	72	72
19	Operation of IMPROVE Sampler co-located with CASTNET	24	24	24	24	24
20	Acquisition and management of NPS, BLM-WSO data	384	384	384	384	384
21	Operation of PM2.5 speciation sampler	0	0	0	0	0

Appendix 4. Current NADP/AMoN and NADP/NTN Sites Supported by CASTNET (October 2015)

ABT147	CT15	Abington	CT	X	X
ALC188	TX41	Alabama-Coushatta	TX	X	
AHL157	IL46	Alhambra	IL	X	X
ANA115*	MI52	Ann Arbor	MI		X
ARE128	PA00	Arendtsville	PA		X
ASH135	ME93	Ashland	ME	X	
BFT142	NC06	Beaufort	NC	X	X
BWR139	MD06	Blackwater	MD	X	
CDR119	WV05	Cedar Creek	WV		X
CDZ171	KY98	Cadiz	KY	X	
CHA467	AZ98	Chiricahua NM	AZ		X
CKT136	KY29	Crockett	KY	X	
CND125	NC26	Candor	NC	X	
CVL151	MS30	Coffeeville	MS	X	
DCP114	OH54	Deer Creek	OH	X	X
ESP127	TN07	Edgar Evins	TN	X	
GAS153	GA41	Georgia Station	GA		X
GTH161	CO10	Gothic	CO		X
HOX148	MI95	Hoxeyville	MI	X	
KEF112	PA29	Kane Exp. Forest	PA	X	
LRL117	PA97	Laurel Hill	PA	X	
MCK131	KY03	Mackville	KY	X	X
MKG113	PA56	M.K. Goddard	PA	X	
PED108	VA24	Prince Edward	VA	X	X
PND165	WY06	Pinedale	WY	X	
PNF126	NC02	Cranberry	NC	X	
PRK134	WI35	Perkinstown	WI	X	X
QAK172	OH99	Quaker City	OH	X	
SAL133	IN20	Roush Lake	IN	X	
SND152	AL99	Sand Mountain	AL	X	

SPD111	TN04	Speedwell	TN	X	X	
STK138	IL37	Stockton	IL	X		
SUM156	FL23	Sumatra	FL	X	X	
UVL124	MI51	Unionville	MI	X	X	
VPI120	VA13	Horton Station	VA	X	X	
WSP144	NJ98	Washington Crossing	NJ	X		
	CO94	Sugarloaf				X
	GA20	Bellville				X
	NC45	Mt. Mitchell				X
	NY52	Bennett Bridge				X
	OR97	Hyslop Farm				X
	WA21	La Grande				X

*Site operator also supported for MDN operations (included in LOE)

Appendix 5. EPA IMPROVE Protocol Sites Supported by CASTNET (May 2015)

Database ID*	IMPROVE ID	Site Name	State
BVL530	BOND1	Bondville	IL
QAK572	QUCI1	Quaker City	OH

* Site ID/designation based on CASTNET database.

Attachment 2

Government Furnished Equipment (GFE)

CODE	DESCRIPTION
1	Unused-Good: Unused item that is usable without repairs
2	Unused-Fair: Unused item that is usable without repairs but is somewhat damaged
3	Unused-Poor: Unused item that is usable without repairs but is damaged
4	Used-Good: Used property that is usable without repairs
5	Used-Fair: Unused item that is usable without repairs but is somewhat damaged
6	Used-Poor: Unused item that is usable without repairs but is damaged
7	Repairs Required-Good: Required repairs are minor and should not exceed 15 percent of cost
8	Repairs Required-Fair: Required repairs are considerable and range from 16 to 40 percent of cost
9	Repairs Required-Poor: Required repairs are major and range from 41 to 65 percent of cost
S	Scrap: Material has no value except for its basic material content
X	Salvage: Property has some value in but repair would exceed 65 percent of cost

	SITE_ID	EQUIP_DESCRIPTION	MODEL_NUMBER	MANUFACTURER	EPA_BARCODE	COST	CONDITION
1	ABT147	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811685	$ 5,638.00	5
2	ABT147	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000627	$ 7,382.00	4
3	ABT147	M-SHIELD, TEMPERATURE	43408	RM Young		$ 404.64	5
4	ABT147	M-SHIELD, TEMPERATURE	43408	RM Young		$ 404.64	5
5	ABT147	P-SAMPLER, WET/DRY	301	Aerochem	493315	$ 1,820.00	5
6	ABT147	F-TOWER, FOLDING B	AT-516	Aluma Tower	000017	$ 1,373.00	4
7	ABT147	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810260X	$ 356.25	5
8	ABT147	M-SENSOR, RELATIVE HUMIDITY	MP-100MF	Rotronic		$ 807.00	5
9	ABT147	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
10	ABT147	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
11	ABT147	M-SENSOR, TEMPERATURE	43347	RM Young	880651X	$ 84.00	5
12	ABT147	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000578	$ 5,807.00	4
13	ABT147	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 428.00	4
14	ABT147	M-SENSOR, SOLAR RADIATION	LIS00SA	LICOR		$ 216.00	4
15	ABT147	M-TOWER, 10 METER	4-30	Universal Manufacturing		$ 444.00	4
16	ABT147	M-MONITOR-AQ, WIND	05305-5	RM Young		$ 822.00	4
17	ABT147	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
18	ABT147	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000467	$ 1,252.00	4
19	ABT147	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 120.00	5
20	ABT147	S-UPS	BR900	APC		$ 180.00	4
21	ABT147	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
22	ABT147	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000220	$ 8,551.00	4
23	ABT147	D-COMPUTER, LAPTOP	D520	Dell Computers	000321	$ 1,088.00	4
24	ABT147	D-DATA LOGGER	CR3000	Campbell Scientific	000413	$ 3,026.00	4
25	ABT147	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
26	ABT147	P-BALANCE, 3-BEAMED	1119D	Ohaus	492178X	$ 702.95	5
27	ALC188	M-RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$ 510.00	5
28	ALC188	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000136	$ 2,480.00	4
29	ALC188	D-DATA LOGGER	CR3000	Campbell Scientific	000422	$ 3,026.00	4
30	ALC188	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
31	ALC188	M-SENSOR, TEMPERATURE	41342	RM Young		$ 205.00	5
32	ALC188	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 166.00	4
33	ALC188	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
34	ALC188	M-SENSOR, TEMPERATURE	43347	RM Young	880644X	$ 84.00	5
35	ALC188	S-UPS	BR900	APC		$ 180.00	4
36	ALC188	M-MONITOR-AQ, WIND	05305	RM Young		$ 667.00	4
37	ALC188	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
38	ALC188	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000363	$ 8,318.00	4
39	ALC188	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000664	$ 1,189.00	4
40	ALC188	D-COMPUTER, LAPTOP	D520	Dell Computers	000274	$ 1,088.00	4
41	ALC188	A-ANALYZER, OZONE	49I	Thermofisher	000689	$ 5,787.00	4
42	ALC188	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
43	ALC188	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 276.48	5
44	ALC188	F-PUMP, VACUUM	107CA110	Thomas Pump	809323X	$ 73.00	5
45	ALC188	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
46	ALC188	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
47	ALC188	M-SENSOR, WETNESS	58101	RM Young		$ 392.00	4
48	ALH157	S-UPS	BX800	APC		$ 127.00	4
49	ALH157	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811683	$ 5,558.00	5
50	ALH157	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
51	ALH157	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
52	ALH157	D-DATA LOGGER	CR3000	Campbell Scientific	000405	$ 3,026.00	4
53	ALH157	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
54	ALH157	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
55	ALH157	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000588	$ 6,524.00	4
56	ALH157	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 549.00	4
57	ALH157	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
58	ALH157	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
59	ALH157	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
60	ALH157	D-COMPUTER, LAPTOP	D520	Dell Computers	000299	$ 1,088.00	4
61	ALH157	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 610.00	4
62	ALH157	M-SENSOR, SOLAR RADIATION	LI200SB	LiCor	880561X	$ 191.95	5
63	ALH157	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
64	ALH157	M-SENSOR, WIND SPEED	100075	Climatronics	810900X	$ 451.00	5
65	ALH157	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
66	ALH157	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000449	$ 8,079.00	4
67	ALH157	A-ANALYZER, OZONE	49I	Thermofisher	000703	$ 5,786.00	4
68	ALH157	M-SENSOR, TEMPERATURE	43347	RM Young	880411X	$ 84.00	5
69	ALH157	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	apex	000647	$ 1,189.00	4
70	ALH157	M-SHIELD, TEMPERATURE	100325-10	Climatronics	880408X	$ 522.00	5
71	ALH157	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronics	880595X	$ 570.00	5
72	ALH157	P-SAMPLER, WET/DRY	301	Aerochem	883631	$ 1,820.00	5
73	ALH157	F-TOWER, FOLDING B	AT-516	Aluma Tower	666366	$ 1,070.00	5
74	ALH157	P-BALANCE, 3-BEAMED	1119D	Ohaus	492177X	$ 702.95	5
75	ALH157	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492151X	$ 375.00	5
76	ANA115	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
77	ANA115	M-SENSOR, WIND DIRECTION	100076	Climatronics	810202X	$ 451.25	5
78	ANA115	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000180	$ 2,329.00	4
79	ANA115	M-SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
80	ANA115	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000436	$ 8,318.00	4
81	ANA115	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4

82	ANA115	D-COMPUTER, LAPTOP	D520	Dell Computers	000298	$ 1,088.00	4
83	ANA115	A-ANALYZER, OZONE	49I	Thermofisher	000746	$ 5,783.00	4
84	ANA115	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810736	$ 5,708.00	5
85	ANA115	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810898X	$ 356.00	5
86	ANA115	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810893X	$ 570.00	5
87	ANA115	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810891X	$ 523.00	5
88	ANA115	M-TOWER, 10 METER	C-33	Aluma Tower	810843X	$ 356.00	5
89	ANA115	P-BALANCE, 3-BEAMED	1119D	Ohaus	492375X	$ 375.00	5
90	ANA115	F-CONTROLLER, MASS FLOW	FC-260	Tylan		$ 752.00	5
91	ANA115	P-SAMPLER, WET/DRY	301	Aerochem	809143	$ 1,780.00	5
92	ANA115	F-POWERSUPPLY/READOUT, FLOW	RO-32	Tylan		$ 600.00	5
93	ANA115	F-PUMP, VACUUM	107CA110	Thomas Pump	809315X	$ 73.00	5
94	ANA115	S-UPS	BR800	APC		$ 190.00	4
95	ANA115	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
96	ANA115	D-DATA LOGGER	CR3000	Campbell Scientific	000338	$ 3,020.00	4
97	ANA115	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
98	ANA115	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	4
99	ANA115	M-SENSOR, SOLAR RADIATION	LI-200SA	Li-Cor		$ 171.00	5
100	ANA115	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
101	ANA115	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
102	ANA115	M-SENSOR, RELATIVE HUMIDITY	HMP50-UAB1A1A	Vaisala		$ 227.00	4
103	ANA115	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000575	$ 5,816.00	4
104	ANA115	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
105	ARE128	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810073X	$ 830.30	5
106	ARE128	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810076X	$ 688.75	5
107	ARE128	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000609	$ 7,372.00	4
108	ARE128	D-COMPUTER, LAPTOP	D520	Dell Computers	000244	$ 1,088.00	4
109	ARE128	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000328	$ 8,551.00	4
110	ARE128	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 132.60	5
111	ARE128	M-SENSOR, WIND SPEED	100075-G3-H0	Climatronics		$ 615.00	4
112	ARE128	S-UPS	BR900	APC		$ 168.00	4
113	ARE128	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 795.00	4
114	ARE128	M-SENSOR, WIND DIRECTION	100076	Climatronics	811497X	$ 451.00	5
115	ARE128	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000462	$ 1,225.00	4
116	ARE128	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	5
117	ARE128	M-SENSOR, WETNESS	58101	RM Young		$ 362.00	4
118	ARE128	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 181.00	4
119	ARE128	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 499.00	4
120	ARE128	D-DATA LOGGER	CR3000	Campbell Scientific	000400	$ 3,026.00	4
121	ARE128	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
122	ARE128	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
123	ARE128	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
124	ARE128	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
125	ARE128	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000580	$ 6,691.00	4
126	ARE128	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 349.00	4
127	ARE128	F-TOWER, FOLDING B	AT-516	Aluma Tower	666361	$ 1,070.00	5
128	ARE128	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810856	$ 5,000.00	5
129	ARE128	P-BALANCE, 3-BEAMED	1119D	Ohaus	492176X	$ 702.95	5
130	ARE128	M-TOWER, 10 METER	C-33	Aluma Tower	810712X	$ 498.00	5
131	ARE128	P-SAMPLER, WET/DRY	301	Aerochem	809136	$ 1,780.00	5
132	ASH135	A-ANALYZER, OZONE	49I	Thermofisher	000743	$ 5,783.00	4
133	ASH135	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
134	ASH135	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 428.00	4
135	ASH135	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 152.00	5
136	ASH135	S-UPS	BR900	APC		$ 180.00	4
137	ASH135	M-MONITOR-AQ,WIND	05305	RM Young		$ 723.00	4
138	ASH135	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 549.00	4
139	ASH135	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
140	ASH135	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
141	ASH135	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
142	ASH135	D-DATA LOGGER	CR3000	Campbell Scientific	000343	$ 3,020.00	4
143	ASH135	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
144	ASH135	M-RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$ 490.00	5
145	ASH135	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492304X	$ 432.00	5
146	ASH135	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811693	$ 5,679.00	5
147	ASH135	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492040X	$ 432.00	5
148	ASH135	F-TOWER, FOLDING	AT048	Aluma Tower	880496X	$ 625.00	5
149	ASH135	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000375	$ 8,555.00	4
150	ASH135	F-PUMP, VACUUM	107CA18	Thomas Pump	880391X	$ 90.00	5
151	ASH135	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000648	$ 1,189.00	4
152	ASH135	D-COMPUTER, LAPTOP	D630	Dell Computers	000480	$ 1,314.00	4
153	AZ98	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000567	$ 5,872.00	4
154	BEL116	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000127	$ 1,394.00	4
155	BEL116	M-SHIELD, TEMPERATURE	43408P	RM Young		$ 617.00	4
156	BEL116	M-MONITOR-AQ, WIND	05305	RM Young		$ 531.00	5
157	BEL116	M-MONITOR-AQ, WIND	05305	RM Young		$ 590.00	5
158	BEL116	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000448	$ 8,079.00	4
159	BEL116	A-ANALYZER, NO/NOY	T200U	Teledyne API	000804	$ 21,324.00	4
160	BEL116	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$ 226.00	4
161	BEL116	T-ANALYZER, SO2	T100U	Teledyne API	000786	$ 12,213.00	4
162	BEL116	T-ZERO AIR SYSTEM	701H	Teledyne API	000776	$ 6,728.00	4
163	BEL116	T-CALIBRATOR, MULTIGAS	T700U	Teledyne API	000790	$ 22,195.00	4
164	BEL116	CELL, FLOW MED.	DCL-MH	Bios International	000195	$ 1,168.00	4

165	BEL116	MONITORING INSTRUMENT - AEROSOLS & GASES	A402080110	Metrohm Analytical BV	000781	$100,000.00	4
166	BEL116	S-SHELTER, 20 X 8 X 8	AIRCARE 20-8	American Ecotech	000722	$ 51,794.00	4
167	BEL116	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000596	$ 1,190.00	4
168	BEL116	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 247.00	4
169	BEL116	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 424.00	4
170	BEL116	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
171	BEL116	A-ANALYZER, OZONE	49I	Thermofisher	000692	$ 5,786.00	4
172	BEL116	S-UPS	BR900	APC		$ 168.00	4
173	BEL116	M-SENSOR, WETNESS	58101	RM Young		$ 386.00	4
174	BEL116	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
175	BEL116	M-SHIELD, TEMPERATURE	43408P	RM Young		$ 617.00	4
176	BEL116	F-DISTILLED WATER SYSTEM	SIMS6V0	Millipore	000185	$ 2,760.00	4
177	BEL116	P-BALANCE, WEIGHING	PRO8100G	Ohaus		$ 597.00	4
178	BEL116	S-SHELTER, WELLS CARGO	EW1211	Crosley Trailers	000311	$ 8,398.00	4
179	BEL116	D-COMPUTER, LAPTOP	D520	Dell Computers	000280	$ 1,088.00	4
180	BEL116	D-DATA LOGGER	CR3000	Campbell Scientific	000341	$ 3,020.00	4
181	BEL116	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
182	BEL116	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
183	BEL116	ANALYZER, MERCURY VAPOR	2537B	Tekran	000392	$ 33,845.00	4
184	BEL116	MERCURY SPECIATION UNIT	1130	Tekran	000394	$ 40,020.00	4
185	BEL116	PUMP MODULE	1130A	Tekran	000396	$ 7,900.00	4
186	BEL116	AIR DRYER	1102	Tekran		$ 950.00	4
187	BEL116	PARTICULATE MERCURY UNIT	1135	Tekran	000398	$ 21,323.00	4
188	BEL116	D-COMPACT FLASH	NL115	Campbell Scientific		$ 409.00	4
189	BEL116	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 349.00	4
190	BEL116	M-TOWER, 10 METER	C-33	Aluma Tower	810092X	$ 498.00	5
191	BFT142	P-SAMPLER, WET/DRY	301	Aerochem	883593	$ 1,820.00	5
192	BFT142	S-UPS	BR900	APC		$ 159.00	4
193	BFT142	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811691	$ 5,638.00	5
194	BFT142	A-ANALYZER, OZONE	49I	Thermofisher	000738	$ 5,782.00	4
195	BFT142	M-SENSOR, TEMPERATURE	41342	RM Young		$ 116.00	4
196	BFT142	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
197	BFT142	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
198	BFT142	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 166.00	5
199	BFT142	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
200	BFT142	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000572	$ 6,583.00	4
201	BFT142	F-PUMP, VACUUM	107CA18	Thomas Pump	810727X	$ 98.00	5
202	BFT142	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
203	BFT142	D-COMPUTER, LAPTOP	D530	Dell Computers	000455	$ 1,177.00	4
204	BFT142	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000463	$ 1,225.00	4
205	BFT142	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000632	$ 3,773.00	4
206	BFT142	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000219	$ 8,551.00	4
207	BFT142	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
208	BFT142	D-DATA LOGGER	CR3000	Campbell Scientific	000498	$ 3,437.00	4
209	BFT142	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	809380X	$ 356.25	5
210	BFT142	P-BALANCE, 3-BEAMED	1119D	Ohaus	492185X	$ 702.95	5
211	BVL130	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
212	BVL130	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
213	BVL130	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 549.00	4
214	BVL130	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
215	BVL130	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
216	BVL130	D-MODEM, DIGITAL - RAVEN X HSDPA	H422-C	Airlink		$ 767.00	4
217	BVL130	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronics	880409X	$ 570.00	5
218	BVL130	D-COMPUTER, LAPTOP	D520	Dell Computers	000277	$ 1,088.00	4
219	BVL130	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 530.00	5
220	BVL130	S-SHELTER, WELLS CARGO	EW1211	Crosley Trailers	000312	$ 8,398.00	4
221	BVL130	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 294.00	5
222	BVL130	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000182	$ 2,329.00	4
223	BVL130	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000651	$ 1,189.00	4
224	BVL130	A-CALIBRATOR, MULTIGAS	T700U	Teledyne API	000758	$ 21,693.00	4
225	BVL130	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000625	$ 7,376.00	4
226	BVL130	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 304.00	4
227	BVL130	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 150.00	5
228	BVL130	A-ANALYZER, CO	T300U	Teledyne API	000760	$ 12,306.00	4
229	BVL130	A-ANALYZER, SO2	T100U	Teledyne API	000765	$ 12,067.00	4
230	BVL130	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492046X	$ 432.00	5
231	BVL130	A-ZERO AIR SYSTEM	701H	Teledyne API	000759	$ 6,629.00	4
232	BVL130	M-MONITOR-AQ, WIND	05320	RM Young		$ 339.00	5
233	BVL130	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000373	$ 8,555.00	4
234	BVL130	M-SENSOR, WIND SPEED	100075	Climatronics	811512X	$ 451.00	5
235	BVL130	A-ANALYZER, NO/NOY	T200U	Teledyne API	000805	$ 21,324.00	4
236	BVL130	M-SENSOR, WIND SPEED	100075	Climatronics	808791X	$ 404.00	5
237	BVL130	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810899X	$ 356.00	5
238	BVL130	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810740	$ 5,558.00	5
239	BVL130	F-TOWER, FOLDING B	AT-516	Aluma Tower	000314	$ 1,070.00	5
240	BVL130	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 276.48	5
241	BVL130	M-SENSOR, WETNESS	58101	RM Young		$ 362.00	4
242	BVL130	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
243	BVL130	D-DATA LOGGER	CR3000	Campbell Scientific	000424	$ 3,026.00	4
244	BWR139	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810733	$ 5,000.00	5
245	BWR139	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000670	$ 1,189.00	4
246	BWR139	M-SHIELD, TEMPERATURE	43408	RM Young	492321X	$ 366.00	5
247	BWR139	M-TOWER, 10 METER	C-33	Climatronics	810714X	$ 498.00	5

248	BWR139	F-TOWER, FOLDING B	AT-516	Aluma Tower	923303	$	1,275.00	5
249	BWR139	F-PUMP, VACUUM	107CAB18	Thomas Pump		$	180.00	4
250	BWR139	D-COMPACT FLASH	NL115	Campbell Scientific		$	369.00	4
251	BWR139	D-DATA LOGGER	CR3000	Campbell Scientific	000431	$	3,026.00	4
252	BWR139	M-MONITOR-AQ, WIND	05305-5	RM Young		$	822.00	4
253	BWR139	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$	342.00	4
254	BWR139	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	226.00	4
255	BWR139	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	304.00	4
256	BWR139	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	247.00	4
257	BWR139	M-RAIN GUAGE, TIPPING BUCKET	TR-525I	Texas Electronics		$	625.00	4
258	BWR139	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$	795.00	4
259	BWR139	M-SENSOR, WETNESS	58101	RM Young		$	342.00	4
260	BWR139	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$	847.00	4
261	BWR139	D-COMPUTER, LAPTOP	D520	Dell Computers	000283	$	1,088.00	4
262	BWR139	A-ANALYZER, OZONE	49I	Thermofisher	000731	$	5,783.00	4
263	BWR139	M-SENSOR, TEMPERATURE	41342	RM Young		$	116.00	4
264	BWR139	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000546	$	9,304.00	4
265	BWR139	M-SENSOR, TEMPERATURE	41342	RM Young		$	110.00	4
266	BWR139	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492316X	$	432.00	5
267	CAD150	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$	930.00	4
268	CAD150	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811951	$	5,558.00	5
269	CAD150	M-SENSOR, WIND DIRECTION	100076	Climatronics	810063X	$	451.25	5
270	CAD150	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor	492242X	$	190.00	5
271	CAD150	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
272	CAD150	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$	795.00	4
273	CAD150	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	811811X	$	356.00	5
274	CAD150	F-POWERSUPPLY/READOUT, FLOW	CPR-1A	Teledyne Hastings	811897X	$	625.50	5
275	CAD150	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	811803X	$	600.00	5
276	CAD150	M-SHIELD, TEMPERATURE	100325-10	Climatronics	811806X	$	523.00	5
277	CAD150	A-PUMP, VACUUM	107CA110	Thomas Pump	664699X	$	116.95	5
278	CAD150	F-CONTROLLER, MASS FLOW	FC-280	Tylan	000090	$	1,517.00	4
279	CAD150	M-SENSOR, WETNESS	58101	RM Young		$	278.00	5
280	CAD150	F-PUMP, VACUUM	107CA110	Thomas Pump	880604X	$	89.53	5
281	CAD150	S-UPS	BR800	APC		$	191.00	4
282	CAD150	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	549.00	4
283	CAD150	D-COMPUTER, LAPTOP	D520	Dell Computers	000306	$	1,088.00	4
284	CAD150	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000364	$	8,318.00	4
285	CAD150	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
286	CAD150	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000624	$	7,376.00	4
287	CAD150	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
288	CAD150	F-TOWER, FOLDING	AT048	Aluma Tower	811543X	$	559.00	5
289	CAD150	M-TOWER, 10 METER	C-33	Aluma Tower	810713X	$	646.00	5
290	CAD150	D-DATA LOGGER	CR3000	Campbell Scientific	000421	$	3,026.00	4
291	CAD150	M-SENSOR, WIND SPEED	100075	Climatronics		$	610.00	4
292	CAD150	D-COMPACT FLASH	NL115	Campbell Scientific		$	368.00	4
293	CAD150	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$	340.00	4
294	CAL885	CAMERA, DIGITAL	COOLPIK L6	Nikon		$	200.00	4
295	CAL885	ANALYZER, OZONE - SITE XFER STD	49I	Thermofisher	000677	$	7,191.00	4
296	CAL885	BASE, FLOW CAL.	DEFINER 220	Bios	000608	$	2,136.00	4
297	CAL885	SENSOR, TEMPERATURE	41342	RM Young		$	110.00	4
298	CAL885	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
299	CAL885	CALIBRATOR, VOLT	DVC-350A	Calibrators, Inc.		$	617.00	4
300	CAL885	MULTIMETER, DIGITAL	8060A	Fluke	810771X	$	341.00	5
301	CAL885	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000658	$	1,189.00	4
302	CAL885	THERMISTOR	4600-1.2.1	C&G indus.		$	780.00	5
303	CAL886	CAMERA, DIGITAL	S6100	Nikon		$	282.00	4
304	CAL886	THERMISTOR	4600-1.2.1	C&G indus.		$	780.00	5
305	CAL886	CALIBRATOR, VOLT	DVC-350A	Calibrators inc.		$	470.00	5
306	CAL886	MULTIMETER, DIGITAL	8060A	Fluke	810103X	$	341.00	5
307	CAL886	ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000691	$	7,194.00	4
308	CAL886	BASE, FLOW CAL.	DEFINER 220	Bios	000607	$	2,136.00	4
309	CAL886	SENSOR, TEMPERATURE	41342	RM Young		$	116.00	4
310	CAL886	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
311	CAL886	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000808	$	1,189.00	4
312	CAL887	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000141	$	1,190.00	4
313	CAL887	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
314	CAT175	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	880448X	$	356.00	5
315	CAT175	M-SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	181.00	4
316	CAT175	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	301.00	5
317	CAT175	M-MONITOR-AQ, WIND	05305	RM Young		$	667.00	4
318	CAT175	F-TOWER, FOLDING B	AT-516	Aluma Tower	666359	$	1,219.00	5
319	CAT175	M-TOWER, 10 METER	4-30	Universal Manufacture		$	276.48	5
320	CAT175	S-STAIRCASE, SHELTER	N/A	Ekto	483922	$	1,640.00	5
321	CAT175	S-SHELTER, 8X8X10, ALUM	8810	Ekto	483918	$	6,040.00	5
322	CAT175	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000550	$	1,190.00	4
323	CAT175	M-SENSOR, WETNESS	58101	RM Young		$	342.00	4
324	CAT175	D-DATA LOGGER	CR3000	Campbell Scientific	000412	$	3,026.00	4
325	CAT175	D-COMPACT FLASH	NL115	Campbell Scientific		$	369.00	4
326	CAT175	D-COMPUTER, LAPTOP	D520	Dell Computers	000275	$	1,088.00	4
327	CAT175	M-INVERTOR, POWER	83F6846	Prosine		$	796.00	4
328	CAT175	M-SENSOR, TEMPERATURE	41342	RM Young		$	129.00	4
329	CAT175	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$	930.00	4
330	CDR119	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810641	$	5,000.00	5
331	CDR119	P-BALANCE, 3-BEAMED	1119D	Ohaus	664734X	$	795.00	5

332	CDR119	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000660	$ 1,189.00	4
333	CDR119	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000623	$ 7,376.00	4
334	CDR119	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000330	$ 8,551.00	4
335	CDR119	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000581	$ 6,691.00	4
336	CDR119	D-COMPUTER, LAPTOP	D520	Dell Computers	000272	$ 1,088.00	4
337	CDR119	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
338	CDR119	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000650	$ 1,189.00	4
339	CDR119	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 424.00	4
340	CDR119	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor	492250X	$ 190.00	5
341	CDR119	M-SENSOR, WIND SPEED	100075	Climatronics	810902X	$ 451.00	5
342	CDR119	M-SENSOR, WIND DIRECTION	100076	Climatronics	880426X	$ 451.25	5
343	CDR119	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
344	CDR119	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 398.00	4
345	CDR119	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
346	CDR119	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
347	CDR119	D-DATA LOGGER	CR3000	Campbell Scientific	000332	$ 3,020.00	4
348	CDR119	P-SAMPLER, WET/DRY	301	Aerochem	809100	$ 1,780.00	5
349	CDR119	F-TOWER, FOLDING B	AT-516	Aluma Tower	928376	$ 1,330.00	5
350	CDR119	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810198X	$ 688.75	5
351	CDR119	M-SHIELD, TEMPERATURE	100325-10	Climatronics	880732X	$ 475.00	5
352	CDR119	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 294.00	5
353	CDR119	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics		$ 477.00	4
354	CDR119	M-SENSOR, WETNESS	58101	RM Young		$ 342.00	4
355	CDR119	S-UPS	BR900	APC		$ 159.00	4
356	CDR119	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
357	CDR119	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
358	CDR119	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
359	CDZ171	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
360	CDZ171	A-ANALYZER, OZONE	49I	Thermofisher	000727	$ 5,783.00	4
361	CDZ171	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
362	CDZ171	F-TOWER, FOLDING B	AT-516B	Aluma Tower	000125	$ 1,562.00	4
363	CDZ171	S-SHELTER, 8X8X10, ALUM	8810	Ekto	666356	$ 7,783.00	5
364	CDZ171	D-DATA LOGGER	CR3000	Campbell Scientific	000352	$ 3,020.00	4
365	CDZ171	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
366	CDZ171	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000367	$ 8,324.00	4
367	CDZ171	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000548	$ 1,190.00	4
368	CDZ171	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 191.00	4
369	CDZ171	S-UPS	BR900	APC		$ 180.00	4
370	CDZ171	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 428.00	4
371	CDZ171	M-RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$ 490.00	5
372	CDZ171	D-COMPUTER, LAPTOP	D520	Dell Computers	000281	$ 1,088.00	4
373	CDZ171	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
374	CDZ171	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
375	CDZ171	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
376	CHE185	M-SENSOR, SOLAR RADIATION	LI200SB	LiCor	880552X	$ 191.95	5
377	CHE185	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
378	CHE185	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
379	CHE185	M-RAIN GAUGE, TIPPING BUCKET	TR-5251	Texas Electronics		$ 444.00	4
380	CHE185	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 294.00	5
381	CHE185	F-TOWER, FOLDING B	AT-516B	Aluma Tower	000054	$ 1,712.00	4
382	CHE185	F-PUMP, VACUUM	107CA110	Thomas Pump	809330X	$ 73.00	5
383	CHE185	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000641	$ 1,189.00	4
384	CHE185	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 286.00	4
385	CHE185	M-SENSOR, WETNESS	58101	RM Young		$ 311.00	5
386	CHE185	M-SENSOR, RELATIVE HUMIDITY	MP-100MF	Rotronic		$ 788.00	5
387	CHE185	M- MONITOR-AQ, WIND	05305VM	RM Young		$ 667.00	4
388	CHE185	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
389	CHE185	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 345.00	4
390	CKT136	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810689	$ 5,558.00	5
391	CKT136	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000468	$ 1,252.00	4
392	CKT136	F-TOWER, FOLDING	AT048	Aluma Tower	810690X	$ 559.00	5
393	CKT136	M-SHIELD, TEMPERATURE	43408	RM Young		$ 404.64	5
394	CKT136	M-SHIELD, TEMPERATURE	43408	RM Young		$ 404.64	5
395	CKT136	S-UPS	BR900	APC		$ 159.00	4
396	CKT136	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 332.00	4
397	CKT136	M-MONITOR-AQ, WIND	05305	RM Young		$ 794.00	4
398	CKT136	M-SENSOR, WETNESS	58101	RM Young		$ 312.00	5
399	CKT136	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
400	CKT136	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 398.00	4
401	CKT136	M-SENSOR, SOLAR RADIATION	101655	LiCor	880733X	$ 285.00	5
402	CKT136	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
403	CKT136	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
404	CKT136	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
405	CKT136	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000617	$ 7,376.00	4
406	CKT136	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000433	$ 8,318.00	4
407	CKT136	D-DATA LOGGER	CR3000	Campbell Scientific	000354	$ 3,020.00	4
408	CKT136	D-COMPUTER, LAPTOP	D520	Dell Computers	000247	$ 1,088.00	4
409	CKT136	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
410	CKT136	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
411	CKT136	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 110.70	5
412	CKT136	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	665638X	$ 400.00	5
413	CND125	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000638	$ 1,189.00	4
414	CND125	F-PUMP, VACUUM	107CA18	Thomas Pump	811520X	$ 90.00	5
415	CND125	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000543	$ 9,304.00	4

416	CND125	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
417	CND125	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
418	CND125	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 217.00	4
419	CND125	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 795.00	4
420	CND125	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	809198X	$ 261.00	5
421	CND125	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
422	CND125	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
423	CND125	D-DATALOGGER	CR3000	Campbell Scientific	000499	$ 3,437.00	4
424	CND125	D-COMPUTER, LAPTOP	D520	Dell Computers	000250	$ 1,088.00	4
425	CND125	F-TOWER, FOLDING B	AT-516	Aluma Tower	923309	$ 1,277.00	5
426	CND125	F-TOWER, FOLDING	AT-177	Aluma Tower	666326X	$ 862.00	5
427	CND125	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810756	$ 6,920.00	5
428	CND125	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
429	CND125	A-ANALYZER, OZONE	49I	Thermofisher	000728	$ 5,783.00	4
430	CNT169	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
431	CNT169	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 150.00	5
432	CNT169	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
433	CNT169	D-COMPUTER, LAPTOP	D520	Dell Computers	000241	$ 1,088.00	4
434	CNT169	M-SENSOR, TEMPERATURE	43347	RM Young		$ 111.00	5
435	CNT169	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
436	CNT169	D-DATALOGGER	CR3000	Campbell Scientific	000417	$ 3,026.00	4
437	CNT169	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 349.00	4
438	CNT169	F-POWERSUPPLY, MFC	N/A	Mactec		$ 208.00	4
439	CNT169	F-CONTROLLER, MASS FLOW	FC-280	Tylan	000086	$ 1,517.00	4
440	CNT169	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
441	CNT169	P-BALANCE, 3-BEAMED	1119D	Ohaus	492186	$ 702.95	5
442	CNT169	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811695	$ 5,679.00	5
443	CNT169	M-SHIELD, TEMPERATURE	43408	RM Young	880756X	$ 366.00	5
444	CNT169	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492048X	$ 432.00	5
445	CNT169	M-MONITOR, AQ WIND	05305-5	R M Young Company		$ 822.00	4
446	CNT169	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000434	$ 8,318.00	4
447	CNT169	A-ANALYZER, OZONE	49I	Thermofisher	000682	$ 5,784.00	4
448	CNT169	A-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000779	$ 3,610.00	4
449	CNT169	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000179	$ 2,329.00	4
450	CNT169	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
451	CNT169	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
452	CNT169	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
453	CO08	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000761	$ 5,876.00	4
454	CO92	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000762	$ 5,876.00	4
455	CO94	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000565	$ 5,876.00	4
456	COW137	S-SYSTEM, LIGHTNING PROTECTION	501-4983-20	LEA Dynatech		$ 879.95	5
457	COW137	F-TOWER, FOLDING	AT048	Aluma Tower	810131X	$ 559.00	5
458	COW137	M-TOWER, 10 METER	C-33	Aluma Tower	810716X	$ 498.00	5
459	COW137	A-PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
460	COW137	D-DATALOGGER	CR3000	Campbell Scientific	000401	$ 3,026.00	4
461	COW137	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
462	COW137	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
463	COW137	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
464	COW137	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor	492248X	$ 190.00	5
465	COW137	D-COMPUTER, LAPTOP	D520	Dell Computers	000261	$ 1,088.00	4
466	COW137	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
467	COW137	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
468	COW137	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 399.00	4
469	COW137	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 610.00	4
470	COW137	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492147X	$ 375.00	5
471	COW137	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
472	COW137	M-SENSOR, WIND SPEED	100075	Climatronics	810186X	$ 451.25	5
473	COW137	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
474	COW137	A-ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000686	$ 7,192.00	4
475	COW137	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000652	$ 1,189.00	4
476	COW137	A-ANALYZER, OZONE	49I	Thermofisher	000726	$ 5,783.00	4
477	COW137	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810731	$ 5,000.00	5
478	COW137	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810182X	$ 688.75	5
479	COW137	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810181X	$ 830.30	5
480	COW137	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	5
481	CTH110	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810245X	$ 830.30	5
482	CTH110	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
483	CTH110	M-TOWER, 10 METER	C-33	Aluma Tower	810098X	$ 498.00	5
484	CTH110	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810760	$ 6,920.00	5
485	CTH110	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	880469X	$ 356.00	5
486	CTH110	F-TOWER, FOLDING B	AT-516	Aluma Tower	666363	$ 1,070.00	5
487	CTH110	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 174.00	4
488	CTH110	D-DATA LOGGER	CR3000	Campbell Scientific	000420	$ 3,026.00	4
489	CTH110	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
490	CTH110	D-COMPUTER. LAPTOP	D630	Dell Computers	000479	$ 1,314.00	4
491	CTH110	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
492	CTH110	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
493	CTH110	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 399.00	4
494	CTH110	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 610.00	4
495	CTH110	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 152.00	5
496	CTH110	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 424.00	4
497	CTH110	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 795.00	4
498	CTH110	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000559	$ 1,190.00	4
499	CTH110	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000628	$ 7,382.00	4

500	CTH110	S-UPS	BR900	APC		$ 180.00	4
501	CTH110	M-SENSOR, WIND SPEED	100075	Climatronics	880583X	$ 451.25	5
502	CTH110	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
503	CTH110	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
504	CTH110	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000368	$ 8,555.00	4
505	CTH110	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810246X	$ 688.75	5
506	CVL151	M-SENSOR, WIND DIRECTION	100076	Climatronics	809180X	$ 404.00	5
507	CVL151	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
508	CVL151	M-SENSOR, WIND SPEED	100075-G3-H0	Climatronics		$ 615.00	4
509	CVL151	A-ANALYZER, OZONE	49I	Thermofisher	000698	$ 5,789.00	4
510	CVL151	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000440	$ 8,316.00	4
511	CVL151	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 62.00	4
512	CVL151	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 62.00	4
513	CVL151	D-DATA LOGGER	CR3000	Campbell Scientific	000410	$ 3,026.00	4
514	CVL151	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
515	CVL151	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
516	CVL151	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 150.00	5
517	CVL151	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 274.89	5
518	CVL151	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 398.00	4
519	CVL151	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
520	CVL151	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 68.00	4
521	CVL151	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	809175X	$ 261.00	5
522	CVL151	D-COMPUTER, LAPTOP	D630	Dell Computers	000477	$ 1,314.00	4
523	CVL151	M-TOWER, 10 METER	C-33	Aluma Tower	810093X	$ 498.00	5
524	CVL151	F-TOWER, FOLDING	AT048	Aluma Tower	811548X	$ 559.00	5
525	CVL151	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811920	$ 5,258.00	5
526	CVL151	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	811818X	$ 600.00	5
527	CVL151	M-SHIELD, TEMPERATURE	100325-10	Climatronics	811821X	$ 523.00	5
528	CVL151	F-POWERSUPPLY/READOUT, FLOW	RO-32	Tylan		$ 600.00	5
529	CVL151	F-CONTROLLER, MASS FLOW	FC-280	Tylan		$ 954.00	5
530	CVL151	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 109.00	4
531	CVL151	S-UPS	BX800	APC		$ 131.00	4
532	CVL151	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
533	DCP114	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880650X	$ 432.00	5
534	DCP114	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
535	DCP114	M-TOWER, 10 METER	4-30	Universal Manufacture	880685X	$ 343.48	5
536	DCP114	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811689	$ 5,638.00	5
537	DCP114	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492162X	$ 375.00	5
538	DCP114	P-BALANCE, 3-BEAMED	1119D	Ohaus	492184X	$ 702.95	5
539	DCP114	P-SAMPLER, WET/DRY	301	Aerochem	809094	$ 1,780.00	5
540	DCP114	F-TOWER, FOLDING B	AT-516	Aluma Tower	000030	$ 1,722.00	4
541	DCP114	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
542	DCP114	D-DATA LOGGER	CR3000	Campbell Scientific	000345	$ 3,020.00	4
543	DCP114	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
544	DCP114	M-SENSOR, TEMPERATURE	43347	RM Young		$ 109.00	5
545	DCP114	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
546	DCP114	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
547	DCP114	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$ 347.00	4
548	DCP114	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
549	DCP114	M-MONITOR-AQ, WIND	05305	RM Young	492287X	$ 411.00	5
550	DCP114	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 428.00	4
551	DCP114	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 150.00	5
552	DCP114	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000589	$ 5,863.00	4
553	DCP114	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
554	DCP114	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000545	$ 9,304.00	4
555	DCP114	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000659	$ 1,189.00	4
556	DCP114	D-COMPUTER, LAPTOP	D520	Dell Computers	000252	$ 1,088.00	4
557	DCP114	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000615	$ 7,372.00	4
558	DCP114	M-SHIELD, TEMPERATURE	43408	RM Young	880648X	$ 366.00	5
559	EGB181	F-TOWER, FOLDING	AT048	Aluma Tower	666306X	$ 749.00	5
560	EGB181	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
561	EGB181	M-SHIELD, TEMPERATURE	43408	RM Young		$ 496.00	5
562	EGB181	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 294.00	5
563	EGB181	F-ADS SAMPLER	F48-125	Allied Electronics		$ 251.00	4
564	EGB181	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$ 759.00	4
565	EGB181	D-DATA LOGGER	CR3000	Campbell Scientific	000408	$ 3,026.00	4
566	EGB181	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
567	EGB181	M-SENSOR, TEMPERATURE	43347	RM Young	492320X	$ 84.00	5
568	EGB181	M-MONITOR-AQ, WIND	05305-5	RM Young		$ 822.00	4
569	EGB181	M-SENSOR, WETNESS	58101	RM Young		$ 362.00	4
570	EGB181	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	811826X	$ 356.00	5
571	EGB181	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 152.00	5
572	EGB181	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
573	EGB181	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000663	$ 1,189.00	4
574	EGB181	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 109.00	4
575	EGB181	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
576	EGB181	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
577	EGB181	D-COMPUTER, LAPTOP	D520	Dell Computers	000263	$ 1,088.00	4
578	EGB181	M-SHIELD, TEMPERATURE	43408	RM Young		$ 404.64	5
579	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$ 62.00	4
580	ESE999	SENSOR, WETNESS	58101	RM Young		$ 278.00	5
581	ESE999	SENSOR, WETNESS	58101	RM Young		$ 386.00	4
582	ESE999	SHIELD, TEMPERATURE	100325-10	Climatronics	810052X	$ 688.75	5
583	ESE999	SHIELD, TEMPERATURE	100325-10	Climatronics	880429X	$ 523.00	5

584	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000290	$	1,088.00	4
585	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000258	$	1,088.00	4
586	ESE999	CALIBRATOR, ELECTRICAL PRESSURE	BET 330	Transcat	000766	$	2,791.00	4
587	ESE999	SHIELD, TEMPERATURE	43408	RM Young		$	404.64	5
588	ESE999	SHIELD, TEMPERATURE	43408	RM Young		$	404.64	5
589	ESE999	MONITOR-AQ, WIND	05320	RM Young		$	473.00	4
590	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C5	Rotronic		$	537.00	4
591	ESE999	CELL, FLOW CAL.	DCL-20K	Bios		$	-	5
592	ESE999	BASE, FLOW CAL.	NEXUS	Bios	000100	$	1,887.00	5
593	ESE999	GAUGE, DIGITAL PRESSURE	DPG4000-30C	Omega Engineering		$	869.00	4
594	ESE999	CALIBRATOR, VOLT	DVC-350A	Calibrators inc.		$	470.00	5
595	ESE999	THERMISTOR	4600-1.2.1	C&G indus.		$	890.00	5
596	ESE999	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000599	$	1,190.00	4
597	ESE999	SENSOR, TEMPERATURE	43347	RM Young	492350X	$	84.00	5
598	ESE999	SENSOR, TEMPERATURE	43347	RM Young		$	95.20	5
599	ESE999	MONITOR-AQ, WIND	05305	RM Young		$	531.00	5
600	ESE999	UPS	BR800	APC		$	191.00	4
601	ESE999	MULTIMETER, DIGITAL	8060A	Fluke		$	440.00	5
602	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000262	$	1,088.00	4
603	ESE999	INVERTOR, POWER	328974	Statpower		$	773.00	4
604	ESE999	DATA LOGGER	CR1000	Campbell Scientific	000494	$	1,539.00	4
605	ESE999	GENERATOR, 5500 WATT	165911	PPG	000101	$	1,226.00	5
606	ESE999	PUMP, VACUUM	2Z866	Gast		$	253.00	4
607	ESE999	SENSOR, RELATIVE HUMIDITY	HYGROPALM 22	Rotronics		$	740.00	4
608	ESE999	SENSOR, RELATIVE HUMIDITY	HYGROPALM 22	Rotronics		$	740.00	4
609	ESE999	CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis Corporation	000172	$	1,736.00	4
610	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$	589.00	5
611	ESE999	PUMP, VACUUM	2107CA20	Thomas Pump		$	226.00	4
612	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492154X	$	375.00	5
613	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	622.00	4
614	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	759.00	4
615	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	549.00	4
616	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	398.00	4
617	ESE999	SENSOR, RELATIVE HUMIDITY	MP 101A-C4	Rotronic		$	761.00	4
618	ESE999	SENSOR, RELATIVE HUMIDITY	MP-100MF	Rotronic		$	807.00	5
619	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	856.00	4
620	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$	822.00	4
621	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$	623.00	4
622	ESE999	SENSOR, WETNESS	58101	RM Young		$	278.00	5
623	ESE999	SENSOR, WIND SPEED	100075	Climatronics	810203X	$	451.25	5
624	ESE999	SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$	150.00	5
625	ESE999	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	217.00	4
626	ESE999	SENSOR, SOLAR RADIATION	LI-200SA	Li-Cor		$	234.00	4
627	ESE999	SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	215.00	4
628	ESE999	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	181.00	4
629	ESE999	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	284.00	5
630	ESE999	TRANSLATOR, SOLAR RAD	70201	RM Young		$	469.00	4
631	ESE999	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$	332.00	4
632	ESE999	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$	856.00	4
633	ESE999	UPS	BR800	APC		$	191.00	4
634	ESE999	MONITOR-AQ, WIND	05305	RM Young		$	702.00	4
635	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	227.00	4
636	ESE999	CONTROLLER, MASS FLOW	AX-MC-50SLPM-D	Apex	000721	$	1,471.00	4
637	ESE999	PUMP, VACUUM	4F742	Gast		$	744.00	4
638	ESE999	CONTROLLER, 16-CHANNEL DC	SDM-CD16S	Campbell Scientific		$	851.00	4
639	ESE999	SHIELD, TEMPERATURE	43409	RM Young	880751X	$	432.00	5
640	ESE999	MONITOR-AQ, WIND	05305VM	RM Young		$	872.00	4
641	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	680.00	4
642	ESE999	SHIELD, TEMPERATURE	43408	RM Young	880750X	$	366.00	5
643	ESE999	SENSOR, TEMPERATURE	41342	RM Young		$	129.00	4
644	ESE999	BELT, CLIMBING	LE-6D	Elk River		$	739.00	4
645	ESE999	MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$	767.00	4
646	ESE999	SHIELD, TEMPERATURE	43408F	RM Young		$	643.00	4
647	ESE999	SHIELD, TEMPERATURE	43408F	RM Young		$	643.00	4
648	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics		$	610.00	4
649	ESE999	SENSOR, WIND SPEED	100075	Climatronics	810050X	$	451.25	5
650	ESE999	DATA LOGGER	CR3000	Campbell Scientific	000428	$	3,026.00	4
651	ESE999	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
652	ESE999	COMPACT FLASH	NL115	Campbell Scientific, Inc.		$	372.00	4
653	ESE999	PUMP, VACUUM	927CA18	Thomas Pumps		$	211.00	4
654	ESE999	PUMP, VACUUM	927CA18	Thomas Pumps		$	211.00	4
655	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000279	$	1,088.00	4
656	ESE999	BASE, FLOW CAL.	NEXUS	Bios	000098	$	1,825.00	5
657	ESE999	BASE, FLOW CAL.	NEXUS	Bios	000099	$	1,825.00	5
658	ESE999	CALIBRATOR, VOLT	DVC-350A	Calibrators Inc.		$	470.00	5
659	ESE999	BASE, FLOW CAL	DEFINER 220	Mesa Laboratories	000771	$	2,123.00	4
660	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810088X	$	356.25	5
661	ESE999	RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$	664.00	4
662	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	226.00	4
663	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
664	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	266.00	4
665	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	137.00	4
666	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	137.00	4
667	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$	490.00	5

668	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	227.00	4
669	ESE999	SENSOR, WETNESS	58101	RM Young		$	278.00	5
670	ESE999	SENSOR, WETNESS	58101	RM Young		$	361.00	5
671	ESE999	SENSOR, WETNESS	58101	RM Young		$	278.00	5
672	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics	811513X	$	451.00	5
673	ESE999	SENSOR, WIND SPEED	100075	Climatronics		$	500.00	5
674	ESE999	CONTROLLER, MASS FLOW	FC-280SAV	Mykrolis	000326	$	1,610.00	4
675	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics		$	610.00	4
676	ESE999	SENSOR, WIND SPEED	100075	Climatronics	809382X	$	451.25	5
677	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics	811808X	$	451.00	5
678	ESE999	RELATIVE HUMIDITY TRANSFER	S-503-DIG-1	Process Measurement & Controls	000606	$	6,525.00	4
679	ESE999	CELL, FLOW CAL.	DCL-5K	Bios		$	-	5
680	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics		$	610.00	4
681	ESE999	CELL, FLOW CAL.	DCL-500	Bios		$	-	5
682	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
683	ESE999	SHIELD, TEMPERATURE	43408	RM Young		$	629.00	4
684	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$	614.00	5
685	ESE999	SENSOR, RELATIVE HUMIDITY	GTL	Rotronics		$	741.00	5
686	ESE999	RELATIVE HUMIDITY TRANSFER	S-503-DIG-1	Process Measurement & Controls	000525	$	5,910.00	4
687	ESE999	SENSOR, WETNESS	58101	RM Young		$	392.00	4
688	ESE999	SENSOR, TEMPERATURE	43347	RM Young	492319X	$	84.00	5
689	ESE999	SENSOR, WETNESS	58101	RM Young		$	312.00	5
690	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$	1,282.00	4
691	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
692	ESE999	PYRANOMETER	LP02	Huksefluk		$	895.00	4
693	ESE999	RADIOMETER	100PSP	Climatronics	810661	$	1,520.00	5
694	ESE999	PYRANOMETER	PSP	Eppley	000108	$	1,975.00	5
695	ESE999	COMPACT FLASH	NL115	Campbell Scientific		$	369.00	4
696	ESE999	TRANSIT, POCKET	37226	Brunton		$	149.00	5
697	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
698	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	549.00	4
699	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
700	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
701	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	226.00	4
702	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	266.00	4
703	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	137.00	4
704	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	280.00	4
705	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	145.00	4
706	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$	614.00	5
707	ESE999	TRANSIT, POCKET	37226	Brunton	810126X	$	127.00	5
708	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	280.00	4
709	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	145.00	4
710	ESE999	CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis	000240	$	1,727.00	4
711	ESE999	SENSOR, RELATIVE HUMIDITY	GTL	Rotronics		$	741.00	5
712	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	226.00	4
713	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	226.00	4
714	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
715	ESE999	SENSOR, WETNESS	58101	RM Young		$	342.00	4
716	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics	880451X	$	451.25	5
717	ESE999	STOPWATCH	N/A	Innovative Time	810129	$	15.00	5
718	ESE999	CELL, FLOW CAL.	DCL-20K	Bios		$	-	5
719	ESE999	CELL, FLOW MED.	DCL-MH	Bios International	000197	$	1,168.00	4
720	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$	822.00	4
721	ESE999	PYRANOMETER	LP02	Huksefluk		$	887.00	4
722	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492156X	$	375.00	5
723	ESE999	MONITOR-AQ, WIND	05305VM	RM Young		$	997.00	4
724	ESE999	SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$	208.00	5
725	ESE999	SENSOR, WETNESS	58101	RM Young		$	278.00	5
726	ESE999	CAMERA, DIGITAL	S6100	Nikon		$	282.00	4
727	ESE999	SENSOR, TEMPERATURE	43347	RM Young		$	93.60	5
728	ESE999	PSYCHROMETER	566-3	Belfort		$	165.00	5
729	ESE999	SENSOR, WETNESS	58101	RM Young		$	312.00	5
730	ESE999	SENSOR, WIND SPEED	100075	Climatronics		$	610.00	4
731	ESE999	ENCLOSURE, DATA LOGGER	15875-59	Campbell Scientific		$	676.00	4
732	ESE999	COMPACT FLASH	NL120	Campbell Scientific		$	237.00	4
733	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	398.00	4
734	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	856.00	4
735	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	398.00	4
736	ESE999	MONITOR-AQ, WIND	05305VM	RM Young		$	872.00	4
737	ESE999	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000602	$	1,190.00	4
738	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	499.00	4
739	ESE999	MONITOR, AQ WIND	05305-5	R M Young Company		$	822.00	4
740	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	856.00	4
741	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$	822.00	4
742	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	399.00	4
743	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	622.00	4
744	ESE999	COMPRESSOR, AIR	PC70/4	Werther International Inc.		$	796.00	4
745	ESE999	SENSOR, TEMPERATURE	41342	RM Young		$	294.00	4
746	ESE999	SENSOR, RELATIVE HUMIDITY	MP 101A-C4	Rotronic		$	761.00	4
747	ESE999	PUMP, VACUUM	107CA18	Thomas Pump	664713X	$	95.20	5
748	ESE999	CELL, FLOW CAL.	DCL-40K	Bios	000106	$	1,842.00	5
749	ESE999	PUMP, VACUUM	107CA18	Thomas Pump	880396X	$	90.00	5
750	ESE999	PUMP, VACUUM	107CAB18	Thomas Pump		$	109.00	4
751	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	398.00	4

752	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$	750.00	4
753	ESE999	BAROMETER, DIGITAL	DA833	Mannix		$	140.00	4
754	ESE999	METER, DIGITAL PS	660	MKS Instruments	000551	$	1,018.00	4
755	ESE999	PUMP, VACUUM	DV-6E	J & B		$	428.00	4
756	ESE999	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	247.00	4
757	ESE999	SENSOR, WETNESS	58101	RM Young		$	278.00	5
758	ESE999	MONITOR, AQ WIND	05305-5	R M Young Company		$	822.00	4
759	ESE999	SENSOR, WIND SPEED	100075	Climatronics		$	530.00	5
760	ESE999	PUMP, VACUUM	107CAB18	Thomas Pump		$	180.00	4
761	ESE999	BALANCE, WEIGHING	PRO8100G	Ohaus		$	613.00	4
762	ESE999	SENSOR, WIND SPEED	100075-G3-H0	Climatronics		$	615.00	4
763	ESE999	SENSOR, WIND DIRECTION	100076-G2-H0	Climatronics		$	685.00	4
764	ESE999	PUMP, VACUUM	107CAB18	Thomas Pump		$	142.00	4
765	ESE999	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
766	ESE999	SENSOR, RELATIVE HUMIDITY	MP-101A-C4	Rotronics		$	665.00	4
767	ESE999	SENSOR, WETNESS	58101	RM Young		$	372.00	4
768	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
769	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
770	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
771	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
772	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
773	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C5	Rotronic		$	537.00	4
774	ESE999	SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$	759.00	4
775	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	227.00	4
776	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	62.00	4
777	ESE999	SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronics	880731X	$	570.00	5
778	ESE999	SENSOR, RELATIVE HUMIDITY	GTL	Rotronics		$	741.00	5
779	ESE999	SENSOR, WIND DIRECTION	100076-G2-H0	Climatronics		$	685.00	4
780	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics		$	610.00	4
781	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics		$	641.00	4
782	ESE999	THERMISTOR	4600-1.2.1	C&G indus.		$	780.00	5
783	ESE999	CELL, FLOW LOW	DCL-L	Bios International	000194	$	1,168.00	4
784	ESE999	TRANSIT, POCKET	37226	Brunton	492204X	$	139.95	5
785	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	137.00	4
786	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	266.00	4
787	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	137.00	4
788	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	266.00	4
789	ESE999	REGULATOR, PRESSURE	PRG101-25	Omega Engineering		$	137.00	4
790	ESE999	BAROMETER, DIGITAL	DA833	Mannix		$	140.00	4
791	ESE999	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$	266.00	4
792	ESE999	MULTIMETER, DIGITAL	8060A	Fluke		$	412.00	5
793	ESE999	PRINTER	IP90	Cannon		$	298.00	4
794	ESE999	COMPRESSOR, AIR	5Z672	Gast	000519	$	1,143.00	4
795	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000296	$	1,088.00	4
796	ESE999	MULTIMETER, DIGITAL	8060A	Fluke		$	571.00	5
797	ESE999	GILIBRATOR, FLOW	GILIBRATOR II	Sensidyne	000109	$	1,986.00	5
798	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000260	$	1,088.00	4
799	ESE999	COMPUTER, LAPTOP	600M	Dell Computers	000184	$	1,435.00	4
800	ESE999	COMPUTER, LAPTOP	D520	Dell Computers	000255	$	1,088.00	4
801	ESE999	COMPUTER, LAPTOP	C600	Dell Computers		$	472.00	4
802	ESE999	COMPUTER, LAPTOP	600M	Dell Computers	000496	$	1,435.00	4
803	ESE999	COMPUTER, LAPTOP	C600	Dell Computers		$	473.00	4
804	ESE999	COMPUTER, LAPTOP	PF181UA	Compaq		$	965.00	4
805	ESE999	COMPUTER, LAPTOP	1100	Dell Computers	000133	$	1,323.00	4
806	ESE999	SENSOR, WETNESS	58101	RM Young		$	278.00	5
807	ESE999	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$	930.00	4
808	ESE999	MONITOR-AQ WIND	05305	RM Young		$	872.00	4
809	ESE999	THERMOMETER, PRECISION	P655	Thermoworks		$	924.00	4
810	ESE999	UPS-SOLA 600	SPI-600B	Sola		$	327.00	4
811	ESE999	PUMP, VACUUM	107CA110	Thomas Pump	880608X	$	89.53	5
812	ESE999	GENERATOR, WIND-DC	AIR X	Northwest Power Company		$	629.00	4
813	ESE999	INVERTOR, POWER	83F6846	Poosine		$	796.00	4
814	ESE999	SENSOR, WETNESS	58101	RM Young		$	372.00	4
815	ESE999	SENSOR, RELATIVE HUMIDITY	HMP50-UAB1A1A	Vaisala		$	227.00	4
816	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	68.00	4
817	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$	68.00	4
818	ESE999	UPS	BX800	APC		$	127.00	4
819	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$	490.00	5
820	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	880398X	$	356.00	5
821	ESE999	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	809173X	$	261.00	5
822	ESE999	RADIOMETER	100PSP	Climatronics	810701	$	1,520.00	5
823	ESE999	WEIGHTS, CALIBR-RAIN GAGE	5633	Belfort	810163	$	225.00	5
824	ESE999	RADIOMETER	100PSP	Climatronics	810665	$	1,520.00	5
825	ESE999	SCALE, PARTS	19390	Northern Tool		$	159.00	4
826	ESE999	PUMP, VACUUM	2107CA20	Thomas Pump		$	226.00	4
827	ESE999	PUMP, VACUUM	2107CA20	Thomas Pump		$	226.00	4
828	ESE999	PUMP, VACUUM	927CA18	Thomas Pumps		$	211.00	4
829	ESE999	PUMP, VACUUM	927CA18	Thomas Pumps		$	211.00	4
830	ESE999	PUMP, VACUUM	927CA18	Thomas Pumps		$	211.00	4
831	ESE999	PUMP, VACUUM	927CA18	Thomas Pumps		$	211.00	4
832	ESE999	BALANCE, WEIGHING	AV4101	Ohaus		$	580.00	4
833	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	499.00	4
834	ESE999	BELT, CLIMBING	LE-6D	Elk River		$	739.00	4
835	ESE999	PUMP, VACUUM	2107CA20	Thomas Pump		$	226.00	4

836	ESE999	SHIELD, TEMPERATURE	43408	RM Young		$ 629.00	4
837	ESE999	SCALE, DIGITAL WEIGHING	AV8101N-US	Ohaus		$ 571.00	4
838	ESE999	SENSOR, TEMPERATURE	43347	RM Young	880647X	$ 84.00	5
839	ESE999	ROUTER, FIREWALL	501	Cisco		$ 389.00	4
840	ESE999	SENSOR, TEMPERATURE	43347	RM Young	880742X	$ 84.00	5
841	ESE999	SENSOR, TEMPERATURE	43347	RM Young		$ 110.00	5
842	ESE999	PSYCHROMETER	566-3	Belfort	492136X	$ 165.00	5
843	ESE999	SENSOR, RELATIVE HUMIDITY	GTL	Rotronics		$ 741.00	5
844	ESE999	UPS	BR900	APC		$ 180.00	4
845	ESE999	COMPUTER, LAPTOP	D610	Dell Computers	000501	$ 1,879.00	4
846	ESE999	MULTIMETER, DIGITAL	8060A	Fluke		$ 440.00	5
847	ESE999	CAMCORDER, SONY	CCD-TR-200	Sony		$ 986.00	5
848	ESE999	CAMERA, 35MM	X3	Olympus	811727X	$ 139.95	5
849	ESE999	COMPUTER, POCKET PC	HX2495B	Hewlett Packard		$ 460.00	4
850	ESE999	VISIBILITY CAMERA SYSTEM	EOS-630	Canon	928386	$ 1,328.00	5
851	ESE999	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000644	$ 1,189.00	4
852	ESE999	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000653	$ 1,189.00	4
853	ESE999	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000655	$ 1,189.00	4
854	ESE999	CALIBRATOR, VOLT	DVC-350A	Datel		$ 485.00	5
855	ESE999	CALIBRATOR, VOLT	DVC-350A	Calibrators Inc.		$ 470.00	5
856	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 549.00	4
857	ESE999	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000668	$ 1,189.00	4
858	ESE999	CELL, FLOW CAL.	DCL-40K	Bios	000105	$ 1,842.00	5
859	ESE999	MONITOR-AQ, WIND	05305	RM Young		$ 531.00	5
860	ESE999	SENSOR, RELATIVE HUMIDITY	MP 101A-C4	Rotronic		$ 761.00	4
861	ESE999	THERMISTOR	631S	Extech Instruments		$ 316.00	4
862	ESE999	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000558	$ 1,190.00	4
863	ESE999	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000809	$ 1,189.00	4
864	ESE999	SENSOR, TEMPERATURE	41342	RM Young		$ 110.00	4
865	ESE999	GAUGE, DIGITAL PRESSURE	DPG4000-30C	Omega Engineering		$ 869.00	4
866	ESE999	SENSOR, WETNESS	58101	RM Young		$ 386.00	4
867	ESE999	SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 399.00	4
868	ESE999	SENSOR, WIND DIRECTION	100076	Climatronics	810187X	$ 451.25	5
869	ESE999	SENSOR, WIND SPEED	100075	Climatronics	810770X	$ 475.00	5
870	ESE999	SHIELD, TEMPERATURE	100325-10	Climatronics	809419X	$ 688.75	5
871	ESE999	SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	809417X	$ 830.30	5
872	ESE999	SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
873	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$ 588.00	5
874	ESE999	PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
875	ESE999	PUMP, VACCUM	4F740	Gast		$ 513.00	4
876	ESE999	CAMERA, DIGITAL	NIK-26100	Nikon		$ 179.00	4
877	ESE999	UPS	BR900	APC		$ 159.00	4
878	ESE999	THERMISTOR	631S	Extech Instruments		$ 316.00	4
879	ESE999	UPS	BX800	APC		$ 127.00	4
880	ESE999	PUMP, VACUUM	107CA18	Thomas Pump	811524X	$ 90.00	5
881	ESE999	COMPUTER, LAPTOP	E6420	Dell	000755	$ 1,217.00	4
882	ESE999	SHIELD, TEMPERATURE	43408F	RM Young		$ 659.00	4
883	ESE999	SHIELD, TEMPERATURE	43408F	RM Young		$ 659.00	4
884	ESE999	PUMP, VACUUM	107CA18	Thomas Pump	809213X	$ 121.00	5
885	ESE999	THERMISTOR	4600-1.2.1	C&G indus.		$ 780.00	5
886	ESE999	CALIBRATOR, MULTIGAS	T700U	Teledyne API	000791	$ 22,195.00	4
887	ESE999	TRANSIT, POCKET	5006 LM	Brunton		$ 211.00	5
888	ESE999	PUMP, VACUUM	107CAB18	Thomas Pump		$ 142.00	4
889	ESE999	TRANSDUCER, PRESSURE	740C	MKS Instruments		$ 930.00	4
890	ESE999	CELL, FLOW CAL.	DCL-20K	Bios		$ -	5
891	ESE999	SENSOR, WIND SPEED	100075	Climatronics	810081X	$ 451.25	5
892	ESE999	MONITOR-AQ, WIND	05305	RM Young		$ 702.00	4
893	ESE999	SENSOR, WETNESS	58101	RM Young		$ 278.00	5
894	ESE999	SENSOR, WETNESS	58101	RM Young		$ 392.00	4
895	ESE999	MONITOR-AQ, WIND	05305VM	RM Young		$ 910.00	4
896	ESE999	THERMISTOR	631S	Extech Instruments		$ 316.00	4
897	ESE999	TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	5
898	ESE999	TRANSLATOR, SOLAR RAD	05603M	RM Young	880699X	$ 145.50	5
899	ESE999	SENSOR, SOLAR RADIATION	101655	LiCor	810065X	$ 285.00	5
900	ESE999	SENSOR, SOLAR RADIATION	70201	RM Young		$ 208.00	4
901	ESE999	TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
902	ESE999	SENSOR, SOLAR RADIATION	70201	RM Young		$ 208.00	4
903	ESE999	TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
904	ESE999	SENSOR, SOLAR RADIATION	LI-200SB	LiCor	880548X	$ 191.95	5
905	ESE999	MOTOR, VARIABLE SYNC	18802	RM Young		$ 1,282.00	4
906	ESE999	PUMP, VACUUM	107CA110	Thomas Pump	809343X	$ 73.00	5
907	ESP127	M-TOWER, 10 METER	C-33	Aluma Tower	810711X	$ 646.00	5
908	ESP127	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000622	$ 7,376.00	4
909	ESP127	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	811624X	$ 356.00	5
910	ESP127	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	811616X	$ 570.00	5
911	ESP127	M-SHIELD, TEMPERATURE	100325-10	Climatronics	811619X	$ 522.00	5
912	ESP127	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810649	$ 5,558.00	5
913	ESP127	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 120.00	5
914	ESP127	D-DATALOGGER	CR3000	Campbell Scientific	000500	$ 3,437.00	4
915	ESP127	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 304.00	4
916	ESP127	M-SENSOR, SOLAR RADIATION	101655	LiCor	810234X	$ 285.00	5
917	ESP127	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
918	ESP127	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
919	ESP127	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4

920	ESP127	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
921	ESP127	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
922	ESP127	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 399.00	4
923	ESP127	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
924	ESP127	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 610.00	4
925	ESP127	M-SENSOR, WIND SPEED	100075	Climatronics	809186X	$ 404.00	5
926	ESP127	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
927	ESP127	A-ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000687	$ 7,192.00	4
928	ESP127	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000642	$ 1,189.00	4
929	ESP127	D-COMPUTER, LAPTOP	D520	Dell Computers	000322	$ 1,088.00	4
930	ESP127	F-TOWER, FOLDING	AT048	Aluma Tower	811544X	$ 559.00	5
931	FBR996	COMPRESSOR, AIR	5Z672	Gast	000521	$ 1,143.00	4
932	FBR996	PUMP, SAMPLING	URG-3000-02BA	URG	000674	$ 4,736.00	4
933	FBR996	PUMP, VACUUM	107CAB18	Thomas Pump		$ 142.00	4
934	FBR996	COMPRESSOR, AIR	PC124E	Werther International	000538	$ 1,715.00	4
935	FBR996	COMPRESSOR, AIR	PC124E	Werther International	000540	$ 1,715.00	4
936	FBR996	AIR SAMPLING BOX	URG-2000-01	URG	000672	$ 3,191.00	4
937	FBR996	AIR SAMPLING BOX	URG-2000-01	URG	000673	$ 3,191.00	4
938	FBR996	BALANCE, 3-BEAMED	1119D	Ohaus	492187X	$ 702.95	5
939	FBR996	PH METER	8000	Orion		$ 284.00	4
940	FBR996	SENSOR, OPTICAL PRECIPITATION	OPD-104	ETI Instruments	000492	$ 1,235.00	4
941	FBR996	PARTICULATE VOLUME MONITOR	PVM-100	Gerber Scientific	923313	$ 19,822.00	5
942	FBR996	CONDUCTIVITY METER	4070	VWR Scientific		$ 187.00	4
943	FBR996	METER, PH	URG-3000-02C	URG		$ 602.00	4
944	FBR996	COMPRESSOR, AIR	PC124E	Werther International	000531	$ 1,717.00	4
945	FBR996	COMPRESSOR, AIR	PC124E	Werther International	000541	$ 1,715.00	4
946	FBR996	PUMP, SAMPLING	URG-3000-02BA	URG	000675	$ 4,736.00	4
947	FBR996	COMPRESSOR, AIR	PC124E	Werther International	000542	$ 1,715.00	4
948	GA20	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000585	$ 5,807.00	4
949	GA20	P-BALANCE, WEIGHING	PRO8100G	Ohaus		$ 613.00	4
950	GAS153	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880641X	$ 432.00	5
951	GAS153	M-SHIELD, TEMPERATURE	43408	RM Young	492309X	$ 366.00	5
952	GAS153	S-SYSTEM, LIGHTNING PROTECTION	501-4983-20	LEA Dynatech		$ 879.95	5
953	GAS153	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 142.00	4
954	GAS153	M-SENSOR, TEMPERATURE	41342	RM Young		$ 110.00	4
955	GAS153	M-RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$ 508.00	4
956	GAS153	F-POWERSUPPLY/READOUT, FLOW	RO-32	Tylan		$ 565.80	5
957	GAS153	F-CONTROLLER, MASS FLOW	FC-280	Tylan	665592X	$ 875.00	5
958	GAS153	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000138	$ 2,480.00	4
959	GAS153	M-SENSOR, RELATIVE HUMIDITY	MP 101A-C4	Rotronics		$ 856.00	4
960	GAS153	D-COMPUTER, LAPTOP	D520	Dell Computers	000295	$ 1,088.00	4
961	GAS153	M-SENSOR, TEMPERATURE	41342	RM Young		$ 110.00	4
962	GAS153	M-SENSOR, WETNESS	58101	RM Young		$ 342.00	4
963	GAS153	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
964	GAS153	M-MONITOR-AQ, WIND	05320	RM Young		$ 473.00	4
965	GAS153	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
966	GAS153	M-SENSOR, SOLAR RADIATION	LI-200SA	Li-Cor		$ 171.00	5
967	GAS153	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 795.00	4
968	GAS153	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
969	GAS153	A-ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000697	$ 7,235.00	4
970	GAS153	D-DATA LOGGER	CR3000	Campbell Scientific, Inc.	000635	$ 3,436.00	4
971	GAS153	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
972	GAS153	M-TOWER, 10 METER	C-33	Aluma Tower	810847X	$ 356.00	5
973	GAS153	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810648	$ 5,558.00	5
974	GAS153	A-ANALYZER, OZONE	49I	Thermofisher	000705	$ 5,789.00	4
975	GAS153	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
976	GTH161	F-TOWER, FOLDING	AT048	Aluma Tower	880484X	$ 625.00	5
977	GTH161	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
978	GTH161	M-TOWER, 10 METER	4-30	Universal Manufacture	492066X	$ 343.48	5
979	GTH161	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492359X	$ 432.00	5
980	GTH161	M-SHIELD, TEMPERATURE	43408	RM Young	492353X	$ 366.00	5
981	GTH161	P-BALANCE, 3-BEAMED	1119D	Ohaus	664749X	$ 702.95	5
982	GTH161	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
983	GTH161	F-POWERSUPPLY, MFC	N/A	Mactec		$ 199.00	4
984	GTH161	F-CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis Corporation	000171	$ 1,736.00	4
985	GTH161	D-DATA LOGGER	CR3000	Campbell Scientific	000416	$ 3,026.00	4
986	GTH161	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
987	GTH161	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
988	GTH161	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
989	GTH161	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	808798X	$ 261.00	5
990	GTH161	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000562	$ 5,823.00	4
991	GTH161	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
992	GTH161	M-SENSOR, SOLAR RADIATION	LI200SB	LiCor	880556X	$ 191.95	5
993	GTH161	M-SENSOR, WETNESS	58101	RM Young		$ 342.00	4
994	GTH161	M-MONITOR, AQ WIND	05305-5	R M Young Company		$ 822.00	4
995	GTH161	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
996	GTH161	A-ANALYZER, OZONE	49I	Thermofisher	000744	$ 5,783.00	4
997	GTH161	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000443	$ 8,316.00	4
998	GTH161	D-COMPUTER, LAPTOP	D520	Dell Computers	000251	$ 1,088.00	4
999	GTH161	A-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000783	$ 3,610.00	4
#####	GTH161	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811688	$ 5,638.00	5
#####	HOW191	M-SENSOR, TEMPERATURE	41342	RM Young		$ 116.00	4
#####	HOW191	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000645	$ 1,189.00	4
#####	HOW191	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4

#####	HOW191	D-COMPACT FLASH	NL115	Campbell Scientific, Inc.		$ 372.00	4
#####	HOW191	D-DATA LOGGER	CR3000	Campbell Scientific	000419	$ 3,026.00	4
#####	HOW191	A-ANALYZER, OZONE	49I	Thermofisher	000730	$ 5,783.00	4
#####	HOW191	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000514	$ 9,316.00	4
#####	HOW191	A-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	HOW191	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	HOW191	D-COMPUTER, LAPTOP	D520	Dell Computers	000297	$ 1,088.00	4
#####	HOX148	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	HOX148	M-SENSOR, TEMPERATURE	43347	RM Young		$ 109.00	5
#####	HOX148	F-CONTROLLER, MASS FLOW	AX-MC-10SLPM-D	Apex	000526	$ 1,318.00	4
#####	HOX148	M-MONITOR-AQ, WIND	05305VM	RM Young		$ 944.00	4
#####	HOX148	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	HOX148	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	HOX148	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	HOX148	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	HOX148	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000614	$ 7,372.00	4
#####	HOX148	M-SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$ 181.00	4
#####	HOX148	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 274.89	5
#####	HOX148	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	HOX148	D-DATA LOGGER	CR3000	Campbell Scientific	000426	$ 3,026.00	4
#####	HOX148	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	HOX148	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	811609X	$ 356.00	5
#####	HOX148	M-SHIELD, TEMPERATURE	43408	RM Young	492045X	$ 366.00	5
#####	HOX148	M-TOWER, 10 METER	C-33	Aluma Tower	810848X	$ 356.00	5
#####	HOX148	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810650	$ 5,558.00	5
#####	HOX148	F-TOWER, FOLDING B	AT-516B	Aluma Tower	000131	$ 1,908.00	4
#####	HOX148	D-COMPUTER, LAPTOP	D520	Dell Computers	000289	$ 1,088.00	4
#####	HOX148	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000432	$ 8,316.00	4
#####	HWF187	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
#####	HWF187	A-ANALYZER, NO/NOY	T200U	Teledyne API	000806	$ 21,324.00	4
#####	HWF187	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 377.42	5
#####	HWF187	M-RAIN GAUGE, TIPPING BUCKET	TR-5251	Texas Electronics		$ 444.00	4
#####	HWF187	F-TOWER, FOLDING B	AT-516	Aluma Tower	666367	$ 1,070.00	5
#####	HWF187	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 110.70	5
#####	HWF187	F-CONTROLLER, MASS FLOW	FC-260	Tylan		$ 752.00	5
#####	HWF187	M-SENSOR, RELATIVE HUMIDITY	MP101A-C5	Rotronic		$ 761.00	4
#####	HWF187	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
#####	HWF187	F-POWERSUPPLY, MFC	N/A	Mactec		$ 195.00	4
#####	HWF187	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 217.00	4
#####	HWF187	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 424.00	4
#####	HWF187	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
#####	HWF187	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	HWF187	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	HWF187	A-COMPRESSOR, AIR	PC124E	Werther International	000539	$ 1,715.00	4
#####	HWF187	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	HWF187	M-MONITOR-AQ, WIND	05305	RM Young	880696X	$ 411.00	5
#####	HWF187	D-COMPACT FLASH	NL115	Campbell Scientific, Inc.		$ 372.00	4
#####	HWF187	D-DATA LOGGER	CR3000	Campbell Scientific	000356	$ 3,020.00	4
#####	HWF187	A-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000780	$ 3,610.00	4
#####	HWF187	A-CALIBRATOR, MULTIGAS	T700U	Teledyne API	000789	$ 22,195.00	4
#####	HWF187	A-ANALYSER, NO/NOY	T200U	Teledyne API	000798	$ 21,324.00	4
#####	HWF187	A-ZERO AIR SYSTEM	701H	Teledyne API	000775	$ 6,728.00	4
#####	HWF187	D-COMPUTER, LAPTOP	D520	Dell Computers	000249	$ 1,088.00	4
#####	HWF187	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000374	$ 8,555.00	4
#####	HWF187	A-ANALYZER, OZONE	49I	Thermofisher	000681	$ 5,784.00	4
#####	HWF187	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
#####	IRL141	M-TOWER, 10 METER	4-30	Universal Manf.		$ 413.00	4
#####	IRL141	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 150.00	5
#####	IRL141	M-SHIELD, TEMPERATURE	43408F	RM YOUNG		$ 550.00	4
#####	IRL141	S-SHELTER, 8X8X10, ALUM	8810	Ekto	000003	$ 15,040.00	5
#####	IRL141	S-TRAILER, SHELTER	1641-TR-2	Ekto	928374	$ 2,260.00	5
#####	IRL141	A-PUMP, VACUUM	107CA110	Thomas Pump	880609X	$ 89.53	5
#####	IRL141	F-TOWER, FOLDING B	AT-516	Aluma Tower	000020	$ 1,373.00	4
#####	IRL141	D-MODEM. DIGITAL - RAVEN X HSDPA	H-4222-C	Airlink		$ 844.00	4
#####	IRL141	D-DATA LOGGER	CR3000	Campbell Scientific	000340	$ 3,020.00	4
#####	IRL141	D-COMPACT FLASH	NL115	Campbell Scientific		$ 409.00	4
#####	IRL141	F-PUMP, VACUUM	107CA18	Thomas Pump	492257X	$ 92.31	5
#####	IRL141	F-CONTROLLER, MASS FLOW	FC-280SAV	Mykrolis	000324	$ 1,610.00	4
#####	IRL141	F-POWERSUPPLY, MFC	N/A	Mactec		$ 114.00	4
#####	IRL141	M-SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	IRL141	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	IRL141	S-UPS	BR900	APC		$ 180.00	4
#####	IRL141	A-ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000694	$ 7,194.00	4
#####	IRL141	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	IRL141	D-COMPUTER, LAPTOP	D520	Dell Computers	000245	$ 1,088.00	4
#####	IRL141	A-ANALYZER, OZONE	49I	Thermofisher	000678	$ 5,784.00	4
#####	IRL141	M-RAIN GAUGE, TIPPING BUCKET	TR-5251	Texas Electronics		$ 444.00	4
#####	IRL141	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 284.00	5
#####	IRL141	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	IRL141	M-MONITOR-AQ, WIND	05305	RM Young	492285X	$ 411.00	5
#####	IRL141	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$ 226.00	4
#####	IRL141	M-SHIELD, TEMPERATURE	43408F	RM YOUNG		$ 550.00	4
#####	KEF112	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
#####	KEF112	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$ 622.00	4

#####	KEF112	M-MONITOR, AQ WIND	05305-5	R M Young		$ 822.00	4
#####	KEF112	M-SENSOR, SOLAR RADIATION	101655	LiCor	811608X	$ 285.00	5
#####	KEF112	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
#####	KEF112	A-ANALYZER, OZONE	49I	Thermofisher	000700	$ 5,789.00	4
#####	KEF112	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	KEF112	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000649	$ 1,189.00	4
#####	KEF112	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000438	$ 8,316.00	4
#####	KEF112	F-TOWER, FOLDING	AT048	Aluma Tower	880493X	$ 625.00	5
#####	KEF112	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811690	$ 5,638.00	5
#####	KEF112	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492034X	$ 432.00	5
#####	KEF112	M-SHIELD, TEMPERATURE	43408	RM Young	492033X	$ 366.00	5
#####	KEF112	M-TOWER, 10 METER	4-30	Universal Manufacture	492064X	$ 343.48	5
#####	KEF112	S-UPS	BX800	APC		$ 127.00	4
#####	KEF112	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492148X	$ 375.00	5
#####	KEF112	M-SENSOR, WETNESS	58101	RM Young		$ 361.00	5
#####	KEF112	F-PUMP, VACUUM	107CA18	Thomas Pump	810726X	$ 98.00	5
#####	KEF112	D-DATA LOGGER	CR3000	Campbell Scientific	000414	$ 3,026.00	4
#####	KEF112	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	KEF112	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	KEF112	D-COMPUTER, LAPTOP	D520	Dell Computers	000256	$ 1,088.00	4
#####	KNZ184	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
#####	KNZ184	A-COMPRESSOR, AIR	PC70/4	Werther International	000626	$ 800.00	4
#####	KNZ184	M-RAIN GAUGE, TIPPING BUCKET	TR-5251	Texas Electronics		$ 444.00	4
#####	KNZ184	S-SHELTER, WELLS CARGO	EW1211	Crosley Trailers	000313	$ 8,398.00	4
#####	KNZ184	M-TOWER, 10 METER	4-30	Universal Manufacture	666341X	$ 395.58	5
#####	KNZ184	F-TOWER, FOLDING B	AT-516B	Aluma Tower	000301	$ 1,908.00	4
#####	KNZ184	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	KNZ184	M-SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	KNZ184	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	KNZ184	D-DATA LOGGER	CR3000	Campbell Scientific	000361	$ 3,020.00	4
#####	KNZ184	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	KNZ184	M-SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$ 181.00	4
#####	KNZ184	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	5
#####	KNZ184	M-MONITOR-AQ, WIND	05305WM	RM Young		$ 997.00	4
#####	KNZ184	M-SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	KNZ184	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000495	$ 8,551.00	4
#####	KNZ184	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	KNZ184	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000616	$ 7,372.00	4
#####	KNZ184	D-COMPUTER, LAPTOP	D520	Dell Computers	000278	$ 1,088.00	4
#####	KNZ184	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000654	$ 1,189.00	4
#####	KNZ184	M-SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
#####	LAB992	PUMP, VACUUM	107CA110	Thomas Pump	880613X	$ 89.53	5
#####	LAB992	BALANCE, WEIGHING	AS64	Ohaus	000191	$ 1,182.00	4
#####	LRL117	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811537	$ 5,000.00	5
#####	LRL117	F-TOWER, FOLDING	AT048	Aluma Tower	810137X	$ 559.00	5
#####	LRL117	F-PUMP, VACUUM	107CA18	Thomas Pump	664715X	$ 95.20	5
#####	LRL117	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	665640X	$ 400.00	5
#####	LRL117	S-UPS	BR800	APC		$ 191.00	4
#####	LRL117	D-DATA LOGGER	CR3000	Campbell Scientific	000344	$ 3,020.00	4
#####	LRL117	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	LRL117	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	LRL117	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	LRL117	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	LRL117	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000460	$ 1,225.00	4
#####	LRL117	M-SENSOR, RELATIVE HUMIDITY	HMP50-UAB1A1A	Vaisala		$ 227.00	4
#####	LRL117	D-COMPUTER, LAPTOP	D520	Dell Computers	000254	$ 1,088.00	4
#####	LRL117	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
#####	LRL117	M-SENSOR, WIND DIRECTION	100076-G2-H0	Climatronics		$ 685.00	4
#####	LRL117	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	5
#####	LRL117	M-SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$ 215.00	4
#####	LRL117	M-SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	LRL117	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000327	$ 8,551.00	4
#####	LRL117	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	LRL117	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 286.00	4
#####	LRL117	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	LRL117	A-ANALYZER, OZONE	49I	Thermofisher	000701	$ 5,789.00	4
#####	LRL117	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810229X	$ 688.75	5
#####	LRL117	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810230X	$ 830.30	5
#####	LRL117	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	MCK131	M-SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$ 215.00	4
#####	MCK131	M-TOWER, 10 METER	4-30	Universal Manufacture	492060X	$ 343.48	5
#####	MCK131	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 400.00	4
#####	MCK131	F-CONTROLLER, MASS FLOW	AX-MC-10SLPM-D	Apex	000528	$ 1,318.00	4
#####	MCK131	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000573	$ 6,583.00	4
#####	MCK131	F-PUMP, VACUUM	107CA18	Thomas Pump	880390X	$ 90.00	5
#####	MCK131	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	MCK131	D-COMPUTER, LAPTOP	D530	Dell Computers	000457	$ 1,177.00	4
#####	MCK131	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	MCK131	D-DATA LOGGER	CR3000	Campbell Scientific	000429	$ 3,026.00	4
#####	MCK131	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000513	$ 9,316.00	4
#####	MCK131	A-ANALYZER, OZONE	49I	Thermofisher	000683	$ 5,784.00	4
#####	MCK131	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$ 623.00	4
#####	MCK131	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
#####	MCK131	S-SYSTEM, LIGHTNING PROTECTION	501-4983-20	LEA Dynatech		$ 879.95	5

#####	MCK131	S-SHELTER, 8X8X10, ALUM	8810	Ekto	492479	$ 6,019.74	5
#####	MCK131	M-SHIELD, TEMPERATURE	43408	RM Young	492336X	$ 366.00	5
#####	MCK131	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492337X	$ 432.00	5
#####	MCK131	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492166X	$ 375.00	5
#####	MCK131	M-SENSOR, TEMPERATURE	41342	RM Young		$ 110.00	4
#####	MCK131	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	MCK131	F-TOWER, FOLDING	AT048	Aluma Tower	880490X	$ 625.00	5
#####	MCK131	M-MONITOR-AQ, WIND	05305	RM Young		$ 648.00	4
#####	MCK231	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	MCK231	D-COMPUTER, LAPTOP	D530	Dell Computers	000458	$ 1,177.00	4
#####	MCK231	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	MCK231	D-DATALOGGER	CR3000	Campbell Scientific	000359	$ 3,020.00	4
#####	MCK231	F-POWERSUPPLY, MFC	N/A	Mactec		$ 156.00	4
#####	MCK231	F-CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis	000236	$ 1,727.00	4
#####	MCK231	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$ 856.00	4
#####	MCK231	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492165X	$ 375.00	5
#####	MCK231	M-SENSOR, WETNESS	58101	RM Young		$ 312.00	5
#####	MCK231	M-SHIELD, TEMPERATURE	43408	RM Young	880530X	$ 366.00	5
#####	MCK231	A-ANALYZER, OZONE	49I	Thermofisher	000723	$ 5,789.00	4
#####	MCK231	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 304.00	4
#####	MCK231	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	MCK231	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	MCK231	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000439	$ 8,316.00	4
#####	MCK231	F-PUMP, VACCUM	107CAB18	Thomas		$ 142.00	4
#####	MCK231	M-SHIELD, TEMPERATURE	43408	RM Young		$ 496.00	5
#####	MCK231	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 166.00	4
#####	MCK231	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	MCK231	M-MONITOR-AQ, WIND	05305	RM Young		$ 667.00	4
#####	MCR997	CELL, FLOW CAL.	DCL-40K	Bios	000104	$ 1,842.00	5
#####	MCR997	DATALOGGER	CR3000	Campbell Scientific	000339	$ 3,020.00	4
#####	MCR997	DATALOGGER	CR3000	Campbell Scientific	000348	$ 3,020.00	4
#####	MCR997	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	MCR997	COMPACT FLASH	NL115	Campbell Scientific, Inc.		$ 372.00	4
#####	MCR997	MODEM, DIGITAL - RAVEN X HSDPA	V4221-V	Airlink		$ 767.00	4
#####	MCR997	MODEM, DIGITAL - RAVEN X HSDPA	V4221-V	Airlink		$ 767.00	4
#####	MCR997	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	MCR997	MODEM, CELLULAR	AIRLINK GX440			$ 859.00	4
#####	MCR997	CONTROLLER, MASS FLOW	FC-280	Tylan		$ 865.00	5
#####	MCR997	CONTROLLER, MASS FLOW	FC-260	Tylan		$ 752.00	5
#####	MCR997	COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	MCR997	COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	MCR997	COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	MCR997	COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	MCR997	COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	MCR997	THERMOMETER, PRECISION	P655	ThermoWorks		$ 919.00	4
#####	MCR997	TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 122.00	4
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	MCR997	SENSOR, SOLAR RADIATION	LI-200SB	LiCor	880559X	$ 191.95	5
#####	MCR997	SENSOR, SOLAR RADIATION	101655	LiCor	809394X	$ 285.00	5
#####	MCR997	POWER SUPPLY, BENCH	1332A	Global Spec.		$ 305.00	5
#####	MCR997	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 247.00	4
#####	MCR997	MONITOR-AQ, WIND	05305	RM Young		$ 667.00	4
#####	MCR997	PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	MCR997	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
#####	MCR997	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
#####	MCR997	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 166.00	4
#####	MCR997	TRANSLATOR, SOLAR RAD	70201	RM Young		$ 425.00	4
#####	MCR997	CABLE TESTER	206	B & K Precision		$ 169.00	4
#####	MCR997	PUMP, VACUUM	107CA18	Thomas Pump	809210X	$ 121.00	5
#####	MCR997	PUMP, VACUUM	107CAB18	Thomas Pumps		$ 174.00	4
#####	MCR997	SENSOR, RELATIVE HUMIDITY	MP-100MF	Rotronic		$ 807.00	4
#####	MCR997	DATA LOGGER	CR3000	Campbell Scientific	000353	$ 3,020.00	4
#####	MCR997	PUMP, VACUUM	107CA18	Thomas Pump	811517X	$ 90.00	5
#####	MCR997	PUMP, VACUUM	107CA18	Thomas Pump		$ 110.70	5
#####	MCR997	PUMP, VACUUM	107CA18	Thomas Pump		$ 132.60	5
#####	MCR997	PUMP, VACUUM	107CAB18	Thomas		$ 142.00	4
#####	MCR997	SENSOR, SOLAR RADIATION	101655	LiCor	809402X	$ 285.00	5
#####	MCR997	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 325.00	4
#####	MCR997	TEST FIXTURE, WIND DIRECTION	101984	Climatronics		$ 610.00	5
#####	MCR997	TEST FIXTURE, WIND DIRECTION	101984	Climatronics		$ 610.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young		$ 109.00	5
#####	MCR997	CONTROLLER, MASS FLOW	FC-280	Tylan	666296X	$ 920.00	5
#####	MCR997	COMPUTER, LAPTOP	D520	Dell Computers	000269	$ 1,088.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000600	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000601	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000661	$ 1,189.00	4
#####	MCR997	VAPORTRON, RH CHAMBER	CL-232-2	Digilog Instr.	000116	$ 7,165.00	5
#####	MCR997	PUMP, VACUUM	107CA18	Thomas Pump	810728X	$ 98.00	5
#####	MCR997	PUMP, VACUUM	107CAB18	Thomas Pumps		$ 174.00	4
#####	MCR997	PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
#####	MCR997	TEST FIXTURE, WIND DIRECTION	101984	Climatronics		$ 652.00	4

#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	MCR997	COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	MCR997	DATA LOGGER	CR3000	Campbell Scientific	000337	$ 3,020.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000461	$ 1,225.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000669	$ 1,189.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-10SLPM-D	Apex	000529	$ 1,318.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000671	$ 1,189.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000469	$ 1,252.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000557	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000555	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000662	$ 1,189.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-10SLPM-D	Apex	000530	$ 1,318.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000591	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000592	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Aepx	000643	$ 1,189.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000597	$ 1,190.00	4
#####	MCR997	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000666	$ 1,189.00	4
#####	MCR997	TEST FIXTURE, LINEARITY	101984	Climatronics		$ 500.00	5
#####	MCR997	TEST FIXTURE, LINEARITY	101984	Climatronics		$ 500.00	5
#####	MCR997	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492153X	$ 375.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young	492326X	$ 84.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young	880546X	$ 84.00	5
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 110.00	4
#####	MCR997	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 305.00	4
#####	MCR997	SENSOR, SOLAR RADIATION	LI200SB	LiCor	880560X	$ 191.95	5
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	MCR997	SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 190.00	5
#####	MCR997	SENSOR, SOLAR RADIATION	101655	LiCor	810188X	$ 285.00	5
#####	MCR997	SCOPEMETER	99B	Fluke	000114	$ 2,180.00	5
#####	MCR997	SOLDERING STATION	XY-988	GC Electronics		$ 418.00	4
#####	MCR997	DATA LOGGER	CR3000	Campbell Scientific	000355	$ 3,020.00	4
#####	MCR997	ULTRASONIC ANEMOMETER	81000V	RM Young	000149	$ 1,997.00	4
#####	MCR997	COMPACT FLASH	CFM100	Campbell Scientific		$ 361.00	4
#####	MCR997	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492160X	$ 375.00	5
#####	MCR997	SENSOR, SOLAR RADIATION	LI-200SB	LiCor	880551X	$ 191.95	5
#####	MCR997	SENSOR, SOLAR RADIATION	101655	LiCor	492146X	$ 285.00	5
#####	MCR997	SENSOR, SOLAR RADIATION	101655	LiCor	880592X	$ 285.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young	492357X	$ 84.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young	492035X	$ 84.00	5
#####	MCR997	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 332.00	4
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young		$ 98.80	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young		$ 109.00	5
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 104.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young		$ 93.60	5
#####	MCR997	SENSOR, TEMPERATURE	41342	RM Young		$ 205.00	5
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young		$ 84.00	5
#####	MCR997	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 312.00	4
#####	MCR997	SENSOR, TEMPERATURE	43347	RM Young	492314X	$ 84.00	5
#####	ME04	Q-RAIN GAUGE, TRANS/REC	5-780	Belfort	809111	$ 1,504.00	5
#####	ME04	P-SAMPLER, WET/DRY	301	Aerochem	493333	$ 1,820.00	5
#####	ME04	Q-BALANCE, 3-BEAMED	1119D	Ohaus	664735X	$ 795.00	5
#####	ME04	P-CONDUCTIVITY METER	4070	VWR Scientific		$ 196.00	4
#####	ME04	P-CONDUCTIVITY METER	4070	VWR Scientific		$ 187.00	4
#####	ME04	P-PH METER	8000	Orion		$ 311.00	4
#####	MEC097	CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000556	$ 1,190.00	4
#####	MEC097	MODEM, CELLULAR	AIRLINK GX440	Mobile Pro Wireless		$ 858.00	4
#####	MEC097	GAUGE, PRESSURE	DPG1000B-15G	Omega Engineering		$ 266.00	4
#####	MEC097	DATA LOGGER	CR850-ST-SW-NC	Campbell Scientific, Inc.	000750	$ 1,848.00	4
#####	MEC099	ZERO AIR SYSTEM	701H	Teledyne API	000772	$ 6,728.00	4
#####	MEC099	COMPUTER, LAPTOP	D520	Dell Computers	000282	$ 1,088.00	4
#####	MEC099	PUMP, VACUUM	107CA18	Thomas Pump		$ 142.00	5
#####	MEC099	CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000656	$ 1,189.00	4
#####	MEC099	SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	MEC099	ANALYZER, SO2	T100U	Teledyne API	000787	$ 12,213.00	4
#####	MEC099	A-ANALYZER, OZONE	49I	Thermofisher	000735	$ 5,782.00	4
#####	MEC099	TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	4
#####	MEC099	DATA LOGGER	CR3000	Campbell Scientific, Inc.	000633	$ 3,436.00	4
#####	MEC099	COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	MEC099	MODEM, DIGITAL - RAVEN X CDMA	V-4221-V	Airlink		$ 767.00	4
#####	MEC099	TOWER, FOLDING B	AT-516B	Aluma Tower	000056	$ 1,712.00	4
#####	MEC099	ANALYZER, NO/NOY	T200U	Teledyne API	000795	$ 21,324.00	4
#####	MEC099	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 325.00	4
#####	MEC099	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$ 226.00	4
#####	MEC099	CALIBRATOR, MULTIGAS	T700U	Teledyne API	000793	$ 22,195.00	4
#####	MI98	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000579	$ 5,863.00	4
#####	MIC920	ROUTER, FIREWALL	501	Cisco		$ 389.00	4
#####	MIC920	ANALYZER, NOY	42C-Y	Thermo Electron	000164	$ 20,879.00	4

#####	MIC920	ANALYZER, MERCURY VAPOR	2537B	Tekran	000391	$ 33,845.00	4
#####	MIC920	AIR DRYER	1102	Tekran		$ 950.00	4
#####	MIC920	MERCURY SPECIATION UNIT	1130	Tekran	000393	$ 40,020.00	4
#####	MIC920	PARTICULATE MERCURY UNIT	1135	Tekran	000397	$ 21,323.00	4
#####	MIC920	PRIMARY CALIBRATION UNIT, MERCURY VAPOR	2505	Tekran	000399	$ 5,945.00	4
#####	MIC920	PUMP MODULE	1130A	Tekran	000395	$ 7,900.00	4
#####	MIC920	COMPUTER, LAPTOP	D830	Dell Computers	000452	$ 1,883.00	4
#####	MIC920	COMPUTER, LAPTOP	E6400	Dell Computers	000554	$ 1,685.00	4
#####	MIC920	COMPUTER, LAPTOP	E6400	Dell Computers	000553	$ 1,685.00	4
#####	MIC920	COMPUTER, LAPTOP	M4600	Dell	000752	$ 2,367.00	4
#####	MIC920	COMPUTER, LAPTOP	M4600	Dell	000751	$ 2,367.00	4
#####	MIC920	TYPE S PROBE	TYPE S	Environmental Supply Company		$ 517.00	4
#####	MIC920	SPHERICAL PROBE, 3D	SPHERICAL	Environmental Supply Company	000764	$ 1,975.00	4
#####	MIC920	CAMERA, DIGITAL	S6100	Nikon		$ 282.00	4
#####	MIC920	COMPUTER, LAPTOP	E6420	Dell	000756	$ 1,217.00	4
#####	MIC920	COMPUTER, LAPTOP	E6400	Dell Computers	000552	$ 1,685.00	4
#####	MIC920	BASE, FLOW CAL.	DEFINER 220	Bios	000475	$ 2,126.00	4
#####	MIC920	BASE, FLOW CAL	DEFINER 220	Mesa Laboratories	000768	$ 2,123.00	4
#####	MIC920	BASE, FLOW CAL	DEFINER 220	Mesa Laboratories	000769	$ 2,123.00	4
#####	MIC920	BASE, FLOW CAL	DEFINER 220	Mesa laboratories	000770	$ 2,123.00	4
#####	MIC920	GAUGE, DIGITAL PRESSURE	DPG4000-30C	Omega Engineering		$ 869.00	4
#####	MIC920	SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	MIC920	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 332.00	4
#####	MIC920	SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	MIC920	DISTILLED WATER SYSTEM	SIMS6V0	Millipore	000192	$ 2,788.00	4
#####	MKG113	M-SENSOR, SOLAR RADIATION	70201	RM Young		$ 208.00	4
#####	MKG113	M-SENSOR, WIND DIRECTION	100076	Climatronics	811621X	$ 416.00	5
#####	MKG113	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$ 227.00	4
#####	MKG113	S-UPS	BR900	APC		$ 168.00	4
#####	MKG113	M-SENSOR, WIND SPEED	100075	Climatronics	811809X	$ 451.00	5
#####	MKG113	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000200	$ 8,455.00	4
#####	MKG113	D-COMPUTER, LAPTOP	D520	Dell Computers	000276	$ 1,088.00	4
#####	MKG113	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	MKG113	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000612	$ 7,372.00	4
#####	MKG113	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000637	$ 1,189.00	4
#####	MKG113	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810262X	$ 830.30	5
#####	MKG113	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810261X	$ 688.75	5
#####	MKG113	M-TOWER, 10 METER	C-33	Aluma Tower	810097X	$ 498.00	5
#####	MKG113	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810642	$ 5,000.00	5
#####	MKG113	F-TOWER, FOLDING B	AT-516	Aluma Tower	666362	$ 1,070.00	5
#####	MKG113	M-CROSSARM ASBLY	101994	Climatronics		$ 244.00	4
#####	MKG113	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 142.00	5
#####	MKG113	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 349.00	4
#####	MKG113	M-SENSOR, WETNESS	58101	RM Young		$ 386.00	4
#####	MKG113	D-DATALOGGER	CR3000	Campbell Scientific	000404	$ 3,026.00	4
#####	MKG113	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	MKG113	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	MKG113	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	MKG113	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	MKG113	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	MKG113	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
#####	MN18	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000605	$ 6,583.00	4
#####	NC45	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000571	$ 6,583.00	4
#####	NC45	P-BALANCE, 3-BEAMED	1119D	Ohaus	664736X	$ 795.00	5
#####	NIC001	M-SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	NIC001	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000785	$ 3,610.00	4
#####	NIC001	D-DATALOGGER	CR850-ST-SW-NC	Campbell Scientific, Inc.	000801	$ 1,845.00	4
#####	NIC001	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000594	$ 1,190.00	4
#####	NIC001	D-MODEM, CELLULAR	AIRLINK GX440	Mobile Pro Wireless		$ 823.00	4
#####	NY22	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000568	$ 6,555.00	4
#####	NY22	P-SAMPLER, WET/DRY	301	Aerochem	809102	$ 1,780.00	5
#####	NY52	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000763	$ 6,555.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000441	$ 8,318.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000544	$ 9,304.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000369	$ 8,555.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000362	$ 8,318.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000453	$ 8,079.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000464	$ 8,551.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000447	$ 8,319.00	4
#####	OCB998	ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000613	$ 7,372.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermofisher	000747	$ 7,201.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000376	$ 8,555.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000366	$ 8,555.00	4
#####	OCB998	ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000618	$ 7,376.00	4
#####	OCB998	CALIBRATOR, MULTIGAS	T700U	Teledyne API	000794	$ 22,195.00	4
#####	OCB998	COMPUTER, LAPTOP	E6420	Dell	000754	$ 1,217.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000679	$ 7,191.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermofisher	000736	$ 7,198.00	4
#####	OCB998	ANALYZER, OZONE PS	49CPS	Thermo Environmental	000122	$ 8,348.00	5
#####	OCB998	ANALYZER, OZONE	49I	Thermofisher	000699	$ 5,789.00	4
#####	OCB998	ANALYZER, OZONE	49I	Thermofisher	000729	$ 5,783.00	4
#####	OCB998	ANALYZER, NO/NOY	T200U	Teledyne API	000767	$ 20,892.00	4
#####	OCB998	ANALYZER, NOY	42IY	Thermo Fisher	000748	$ 23,177.00	4

#####	OCB998	ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000629	$ 7,382.00	4
#####	OCB998	ANALYZER, OZONE	49I	Thermofisher	000680	$ 5,784.00	4
#####	OCB998	ANALYZER, OZONE PS	49IPS	Thermo Fisher	000380	$ 10,022.00	4
#####	OCB998	ANALYZER, OZONE PS	49IPS	Thermo Fisher	000636	$ 11,732.00	4
#####	OCB998	MULTIGAS CALIBRATOR	146C	Thermo Electron	000168	$ 10,366.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000688	$ 7,237.00	4
#####	OCB998	ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000198	$ 8,455.00	4
#####	OCB998	ANALYZER, SO2	43C-TLE	Thermo Electron	000176	$ 14,211.00	4
#####	OCB998	ANALYZER, NOY	42C-Y	Thermo Electron	000165	$ 20,879.00	4
#####	OCB998	ANALYZER, CO	48C-TLE	Thermo Electron	000145	$ 13,946.00	4
#####	OCB998	MULTIGAS CALIBRATOR	146C	Thermo Electron	000167	$ 10,366.00	4
#####	OCB998	PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	OCB998	COMPUTER, LAPTOP	D610	Dell Computers	000221	$ 1,879.00	4
#####	OCB998	COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	OCB998	DATA LOGGER	CR3000	Campbell Scientific	000334	$ 3,020.00	4
#####	OFF987	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	OFF987	COMPUTER, POLLING	221-2882	Dell Computers		$ 896.00	4
#####	OFF987	METER, PH	14004-324	Orion		$ 416.00	4
#####	OFF987	DATA LOGGER	CR3000	Campbell Scientific, Inc.	000634	$ 3,436.00	4
#####	OFF987	COMPACT FLASH	NL115	Campbell Scientific, Inc.		$ 372.00	4
#####	OFF987	UPS	BR900	APC		$ 159.00	4
#####	OFF987	DATA LOGGER	CR3000	Campbell Scientific	000336	$ 3,020.00	4
#####	OFF987	MODEM, DIGITAL - RAVEN X HSDPA	V4221-V	Airlink		$ 767.00	4
#####	OFF987	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 844.00	4
#####	OFF987	MODEM, DIGITAL - RAVEN X EVDO	V4221-VD	Airlink		$ 767.00	4
#####	OFF987	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	OFF987	MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	OFF987	UPS	BR900	APC		$ 168.00	4
#####	OFF987	COMPUTER, LAPTOP	E6420	Dell	000757	$ 1,217.00	4
#####	OFF987	PH METER	8000	Orion		$ 530.00	4
#####	OFF987	MONITOR, PC	SX2210T	Dell Computers		$ 416.00	4
#####	OFF987	PRINTER, LASERJET	2200DN	Hewlett Packard		$ 940.00	4
#####	OFF987	8-PORT USB PS/2 COMBO VGA KVM SWITCH	GCS1808	IOGEAR		$ 345.00	4
#####	OFF987	8-PORT GIGABIT SMART SWITCH	SLM2008	Cisco		$ 121.00	4
#####	OFF987	DIGITIZER, STYLUS	CTH661	Wacom		$ 207.00	4
#####	OFF987	UPS	SUA1500	APC		$ 636.00	4
#####	OFF987	USB HUB	CPH720P	Cyberpower		$ 34.00	4
#####	OFF987	MODEM, EXTERNAL	USR5633B	US Robotics		$ 56.00	4
#####	OFF987	MODEM, EXTERNAL	USR5633B	US Robotics		$ 56.00	4
#####	OFF987	COMPUTER, POLLING	CH235	Dell Computers	000386	$ 1,899.00	4
#####	OFF987	MODEM, EXTERNAL	33.6K	US Robotics		$ 109.00	4
#####	OFF987	COMPUTER, POLLING	221-2882	Dell Computers		$ 896.00	4
#####	OFF987	POWER SUPPLY, BENCH	1332A	Global Spec.		$ 305.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	POST HOLE DIGGER	N/A	N/A	883646	$ 1,000.00	5
#####	OFR991	SHIELD, TEMPERATURE	43408	RM Young	880535X	$ 366.00	5
#####	OFR991	SHIELD, TEMPERATURE	43408	RM Young	492310X	$ 366.00	5
#####	OFR991	ANALYZER, OZONE	49C/450	Thermo Environmental	000308	$ 8,426.00	4
#####	OFR991	ANALYZER, OZONE	49C/450	Thermo Environmental	000117	$ 8,116.00	5
#####	OFR991	ANALYZER, OZONE	49C/450	Thermo Environmental	000119	$ 8,116.00	5
#####	OFR991	ANALYZER, OZONE	49C-450	Teco	000083	$ 8,115.00	4
#####	OFR991	ANALYZER, OZONE	49C/450	Thermo Environmental	000309	$ 8,426.00	4
#####	OFR991	RAIN GAUGE, TRANS/ REC	8739-1	Belfort	000124	$ 3,574.00	4
#####	OFR991	ANALYZER, OZONE DC	202	2B Technologies	000177	$ 4,489.00	4
#####	OFR991	ANALYZER, OZONE DC	202	2B Technologies	000223	$ 4,569.00	4
#####	OFR991	ANALYZER, OZONE DC	202	2B Technologies	000150	$ 4,489.00	4
#####	OFR991	PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000582	$ 6,524.00	4
#####	OFR991	PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000587	$ 5,823.00	4
#####	OFR991	MONITOR-AQ, WIND	05305VM	RM Young		$ 723.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 531.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	811522X	$ 90.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	810764X	$ 121.00	5
#####	OFR991	SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492311X	$ 432.00	5
#####	OFR991	SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880659X	$ 432.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen	811969X	$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	CANISTER, VOC	6L-9INCH	BRC Rasmussen		$ 472.00	5
#####	OFR991	SENSOR, WIND DIRECTION	100076	Climatronics	880734X	$ 451.25	5
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics	810219X	$ 451.25	5

#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics	880427X	$ 451.25	5
#####	OFR991	MODEM, EXTERNAL	S1936D	Motorola		$ 253.00	4
#####	OFR991	MONITOR-AQ, WIND	05305VM	RM Young		$ 667.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 667.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 872.00	4
#####	OFR991	MONITOR-AQ, WIND	05305-5	RM Young		$ 822.00	4
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	664711X	$ 95.20	5
#####	OFR991	PUMP, VACUUM	107CA110	Thomas Pump	809327X	$ 73.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	811521X	$ 90.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	880386X	$ 90.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	811670X	$ 90.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	810718X	$ 98.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	811737X	$ 90.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump	811580X	$ 90.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 110.70	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 110.70	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 132.60	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 132.60	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 108.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 120.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 120.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 142.00	5
#####	OFR991	PUMP, VACUUM	107CA18	Thomas Pump		$ 142.00	5
#####	OFR991	PUMP, VACUUM	107CAB18	Thomas Pump		$ 109.00	4
#####	OFR991	PUMP, VACUUM	107CAB18	Thomas Pump		$ 109.00	4
#####	OFR991	PUMP, VACUUM	107CAB18	Thomas Pump		$ 142.00	4
#####	OFR991	PUMP, VACUUM	107CAB18	Thomas Pumps		$ 174.00	4
#####	OFR991	PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
#####	OFR991	PUMP, VACUUM	170CAB18	Thomas Pump		$ 180.00	4
#####	OFR991	PUMP, VACUUM	2107CA20	Thomas Pump		$ 226.00	4
#####	OFR991	SAMPLER, LOW FLOW	LFS-113	Atex		$ 694.00	4
#####	OFR991	SENSOR, RELATIVE HUMIDITY	MP100H	Rotronics		$ 933.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 362.00	4
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 342.00	4
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 342.00	4
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 392.00	4
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 372.00	4
#####	OFR991	SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	OFR991	SENSOR, WIND DIRECTION	100076-G2-H0	Climatronics		$ 685.00	4
#####	OFR991	SENSOR, WIND DIRECTION	100076-G2-H0	Climatronics		$ 685.00	4
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics	809170X	$ 404.00	5
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	OFR991	SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	OFR991	SHIELD, TEMPERATURE	43408	RM Young	880660X	$ 366.00	5
#####	OFR991	SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
#####	OFR991	SHIELD, TEMPERATURE	43408	RM Young		$ 532.00	4
#####	OFR991	RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 351.00	4
#####	OFR991	RAIN GAUGE, TIPPING BUCKET	TR-5251	Texas Electronics		$ 444.00	4
#####	OFR991	RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$ 510.00	5
#####	OFR991	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810180X	$ 356.25	5
#####	OFR991	RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	809181X	$ 261.00	5
#####	OFR991	DISTILLED WATER SYSTEM	SIMS6V0	Millipore	000193	$ 2,788.00	4
#####	OFR991	SENSOR, SOLAR RADIATION	LI-200SZ	Li-Cor		$ 251.00	4
#####	OFR991	ZERO AIR SUPPLY	111	Thermo Electron	000161	$ 4,627.00	4
#####	OFR991	ANALYZER, CO	48C-TLE	Thermo Electron	000146	$ 13,946.00	4
#####	OFR991	ANALYZER, SO2	43C-TLE	Thermo Electron	000142	$ 14,211.00	4
#####	OFR991	RAIN GAUGE, TRANS/REC	B-5-780	Belfort	000128	$ 3,905.00	4
#####	OFR991	PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000584	$ 5,816.00	4
#####	OFR991	PUMP, VACUUM	2107CA20	Thomas Pump		$ 226.00	4
#####	OFR991	PUMP, VACCUM	107CAB18	Thomas Pump		$ 180.00	4
#####	OFR991	PUMP, VACUUM	107CA110	Thomas Pump		$ 73.00	5
#####	OFR991	MONITOR, AQ WIND	05305	RM Young		$ 794.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 590.00	5
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 702.00	4
#####	OFR991	MONITOR-AQ, WIND	05305VM	RM Young		$ 944.00	4

#####	OFR991	MONITOR, AQ-WIND	05305	RM Young		$ 723.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 663.00	4
#####	OFR991	CELLULAR MODEM	819S	Land2Cell		$ 294.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 493.20	5
#####	OFR991	MONITOR-AQ, WIND	05305VM	RM Young		$ 872.00	4
#####	OFR991	MONITOR-AQ, WIND	05305	RM Young		$ 723.00	4
#####	OH71	P-SAMPLER, WET/DRY	301	Aerochem	883678	$ 1,820.00	5
#####	OR97	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000566	$ 5,872.00	4
#####	OXF122	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	OXF122	F-TOWER, FOLDING B	AT-516	Aluma Tower	000018	$ 1,373.00	4
#####	OXF122	D-DATA LOGGER	CR3000	Campbell Scientific	000425	$ 3,026.00	4
#####	OXF122	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	OXF122	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	OXF122	S-UPS	BR800	APC		$ 190.00	4
#####	OXF122	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	OXF122	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492150X	$ 375.00	5
#####	OXF122	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 304.00	4
#####	OXF122	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	OXF122	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000199	$ 8,455.00	4
#####	OXF122	D-COMPUTER, LAPTOP	D520	Dell Computers	000242	$ 1,088.00	4
#####	OXF122	M-SENSOR, TEMPERATURE	43347	RM Young	492346X	$ 84.00	5
#####	OXF122	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000547	$ 1,190.00	4
#####	OXF122	A-ANALYZER, OZONE	49I	Thermofisher	000693	$ 5,786.00	4
#####	OXF122	M-TOWER, 10 METER	C-33	Aluma Tower	810017X	$ 646.00	5
#####	OXF122	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810757	$ 5,000.00	5
#####	OXF122	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	PAD980	TOWER, FOLDING	AT-431	Aluma Tower	666337X	$ 896.00	5
#####	PAD980	TOWER, FOLDING B	AT-516D-1	Aluma Tower	000181	$ 2,329.00	4
#####	PAD980	TOWER, FOLDING	AT-431	Aluma Tower		$ 971.00	5
#####	PAD980	TOWER, FOLDING	AT-431	Aluma Tower		$ 971.00	5
#####	PAD980	TRAILER, 8X5- ALUMINUM	SW-8-N	Crosley	492169	$ 2,288.00	5
#####	PAD980	COLLECTOR, PRECIPITATION	B1	M.I.C. Company	928371	$ 3,715.00	5
#####	PAD980	TOWER, 10 METER	4-30	Universal Manufacturing		$ 444.00	4
#####	PAD980	TOWER, 10 METER	C-33	Aluma Tower	810091X	$ 498.00	5
#####	PAD980	TOWER, FOLDING B	AT-516D-1	Aluma Tower	000147	$ 2,627.00	4
#####	PAD980	SHELTER, 8X8X10, ALUM	8810	Ekto	811686	$ 5,638.00	5
#####	PAD980	SHELTER, 8X8X10, ALUM	8810	Ekto	811950	$ 5,558.00	5
#####	PAD980	TOWER, FOLDING B	AT-516D-1	Aluma Tower	000782	$ 2,350.00	4
#####	PAD980	TOWER, FOLDING B	AT-516D-1	Aluma Tower	000799	$ 3,737.00	4
#####	PAD980	TOWER, FOLDING B	AT-516D-1	Aluma Tower	000800	$ 3,737.00	4
#####	PAD980	TOWER, 10 METER	4-30	Universal Manufacture		$ 276.48	5
#####	PAD980	TOWER, FOLDING B	AT-516	Aluma Tower	000028	$ 1,722.00	4
#####	PAD980	TOWER, FOLDING	AT-516D-1	Aluma Tower	000749	$ 3,781.00	4
#####	PAD980	TOWER, 10 METER	4-30	Universal Manf.		$ 483.00	4
#####	PAD980	TOWER, 10 METER	4-30	Universal Manufacturing		$ 444.00	4
#####	PAD980	TOWER, FOLDING	AT-431	Aluma Tower		$ 919.00	5
#####	PAL190	D-COMPUTER, LAPTOP	D630	Dell Computers	000451	$ 1,735.00	4
#####	PAL190	A-ANALYZER, OZONE	49I	Thermofisher	000733	$ 5,783.00	4
#####	PAL190	M-MONITOR-AQ, WIND	05305	RM Young		$ 667.00	4
#####	PAL190	M-SENSOR, SOLAR RADIATION	101655	LiCor	811650X	$ 285.00	5
#####	PAL190	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	4
#####	PAL190	M-TOWER, 10 METER	4-30	Universal Manufacturing		$ 514.00	4
#####	PAL190	F-TOWER, FLOW	AT-516-1	Aluma Tower	000384	$ 3,054.00	4
#####	PAL190	S-SHELTER, 8X8X10, ALUM	TYPE E	Shelter One	000350	$ 19,040.00	4
#####	PAL190	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 665.00	4
#####	PAL190	M-SHIELD, TEMPERATURE	43408F	RM Young		$ 643.00	4
#####	PAL190	M-SHIELD, TEMPERATURE	43408F	RM Young		$ 643.00	4
#####	PAL190	S-UPS	BR900	APC		$ 159.00	4
#####	PAL190	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 325.00	4
#####	PAL190	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 325.00	4
#####	PAL190	D-DATA LOGGER	CR3000	Campbell Scientific	000347	$ 3,020.00	4
#####	PAL190	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	PAL190	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	PAL190	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 398.00	4
#####	PAL190	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000604	$ 1,190.00	4
#####	PAL190	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 109.00	4
#####	PAL190	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	PAL190	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000214	$ 8,551.00	4
#####	PAL190	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	PAL190	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
#####	PAL190	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880653X	$ 432.00	5
#####	PAL190	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	PAR107	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810212X	$ 356.25	5
#####	PAR107	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
#####	PAR107	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor	880558X	$ 191.95	5
#####	PAR107	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	PAR107	A-ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000704	$ 7,192.00	4
#####	PAR107	D-COMPUTER, LAPTOP	D520	Dell Computers	000253	$ 1,088.00	4
#####	PAR107	A-ANALYZER, OZONE	49I	Thermofisher	000737	$ 5,782.00	4
#####	PAR107	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000603	$ 1,190.00	4
#####	PAR107	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810214X	$ 688.75	5
#####	PAR107	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810734	$ 5,000.00	5
#####	PAR107	F-TOWER, FOLDING	AT048	Aluma Tower	810132X	$ 559.00	5
#####	PAR107	M-TOWER, 10 METER	C-33	Aluma Tower	810715X	$ 498.00	5

#####	PAR107	F-PUMP, VACUUM	107CA18	Thomas Pump	664714X	$ 95.20	5
#####	PAR107	M-SENSOR, WETNESS	58101	RM Young		$ 372.00	4
#####	PAR107	S-UPS	BR900	APC		$ 159.00	4
#####	PAR107	D-DATA LOGGER	CR3000	Campbell Scientific	000333	$ 3,020.00	4
#####	PAR107	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	PAR107	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	PAR107	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	PAR107	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	PAR107	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	PAR107	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 641.00	4
#####	PAR107	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 549.00	4
#####	PAR107	M-SENSOR, WIND SPEED	100075	Climatronics	811607X	$ 416.00	5
#####	PAR107	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810213X	$ 830.30	5
#####	PED108	F-TOWER, FOLDING	AT048	Aluma Tower	811541X	$ 559.00	5
#####	PED108	A-ANALYZER, OZONE	49I	Thermofisher	000732	$ 5,783.00	4
#####	PED108	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	811508X	$ 570.00	5
#####	PED108	M-SHIELD, TEMPERATURE	100325-10	Climatronics	811506X	$ 522.00	5
#####	PED108	M-TOWER, 10 METER	C-33	Aluma Tower	810846X	$ 356.00	5
#####	PED108	P-BALANCE, 3-BEAMED	1119D	Ohaus	664733X	$ 795.00	5
#####	PED108	P-SAMPLER, WET/DRY	301	Aerochem	809092	$ 1,780.00	5
#####	PED108	F-CONTROLLER, MASS FLOW	FC-280	Tylan	000089	$ 1,517.00	4
#####	PED108	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	PED108	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	665635X	$ 400.00	5
#####	PED108	D-DATA LOGGER	CR3000	Campbell Scientific	000406	$ 3,026.00	4
#####	PED108	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	PED108	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	PED108	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	PED108	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 499.00	4
#####	PED108	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	PED108	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000574	$ 6,011.00	4
#####	PED108	M-SENSOR, SOLAR RADIATION	LI-200SA	Li-Cor		$ 171.00	5
#####	PED108	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$ 424.00	4
#####	PED108	M-SENSOR, WIND DIRECTION	100076	Climatronics	809202X	$ 404.00	5
#####	PED108	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000620	$ 7,376.00	4
#####	PED108	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	PED108	M-SENSOR, WIND SPEED	100075	Climatronics	810268X	$ 451.25	5
#####	PED108	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000370	$ 8,555.00	4
#####	PED108	D-COMPUTER, LAPTOP	D520	Dell Computers	000287	$ 1,088.00	4
#####	PED108	F-PUMP, VACUUM	107CA18	Thomas Pump	810722X	$ 98.00	5
#####	PED108	S-UPS	BR800	APC		$ 190.00	4
#####	PED108	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000788	$ 3,610.00	4
#####	PED108	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810646	$ 5,558.00	5
#####	PND165	D-DATA LOGGER	CR3000	Campbell Scientific	000403	$ 3,026.00	4
#####	PND165	F-TOWER, FOLDING B	AT-516B	Aluma Tower	000055	$ 1,712.00	4
#####	PND165	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 142.00	5
#####	PND165	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811698	$ 5,679.00	5
#####	PND165	A-ZERO AIR SYSTEM	701H	Teledyne API	000773	$ 6,728.00	4
#####	PND165	A-CALIBRATOR, MULTIGAS	T700U	Teledyne API	000792	$ 22,195.00	4
#####	PND165	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000619	$ 7,376.00	4
#####	PND165	D-COMPUTER, LAPTOP	D520	Dell Computers	000257	$ 1,088.00	4
#####	PND165	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000208	$ 8,458.00	4
#####	PND165	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	PND165	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	PND165	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000549	$ 1,190.00	4
#####	PND165	A-ANALYZER, NO/NOY	T200U	Teledyne API	000807	$ 21,324.00	4
#####	PNF126	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492163X	$ 375.00	5
#####	PNF126	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$ 856.00	4
#####	PNF126	M-SENSOR, TEMPERATURE	43347	RM Young		$ 109.00	5
#####	PNF126	F-CONTROLLER, MASS FLOW	FC-280SAV	Mykrolis	000206	$ 1,817.00	4
#####	PNF126	F-POWERSUPPLY, MFC	N/A	Mactec		$ 195.00	4
#####	PNF126	D-DATA LOGGER	CR3000	Campbell Scientific	000346	$ 3,020.00	4
#####	PNF126	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	PNF126	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	PNF126	D-COMPUTER, LAPTOP	D520	Dell Computers	000264	$ 1,088.00	4
#####	PNF126	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
#####	PNF126	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000178	$ 2,329.00	4
#####	PNF126	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811694	$ 5,679.00	5
#####	PNF126	M-TOWER, 10 METER	4-30	Universal Manufacture	492073X	$ 343.48	5
#####	PNF126	M-SHIELD, TEMPERATURE	43408	RM Young	492027X	$ 366.00	5
#####	PNF126	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492028X	$ 432.00	5
#####	PNF126	A-ANALYZER, OZONE	49I	Thermofisher	000695	$ 5,787.00	4
#####	PNF126	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000512	$ 9,306.00	4
#####	PNF126	M-SENSOR, TEMPERATURE	43347	RM Young	492362X	$ 84.00	5
#####	PNF126	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	PNF126	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 304.00	4
#####	PNF126	M-SENSOR, SOLAR RADIATION	101655	LiCor	880449X	$ 285.00	5
#####	PNF126	M-MONITOR-AQ, WIND	05305	RM Young		$ 478.80	5
#####	PNF126	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	PNF126	M-SENSOR, WETNESS	58101	RM Young		$ 380.00	4
#####	PRK134	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811948	$ 5,258.00	5
#####	PRK134	F-TOWER, FOLDING	AT048	Aluma Tower	880482X	$ 625.00	5
#####	PRK134	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880515X	$ 432.00	5
#####	PRK134	M-SHIELD, TEMPERATURE	43408	RM Young	880514X	$ 366.00	5
#####	PRK134	M-TOWER, 10 METER	4-30	Universal Manufacture	880683X	$ 343.48	5

#####	PRK134	P-BALANCE, 3-BEAMED	1119D	Ohaus	664750X	$	702.95	5
#####	PRK134	P-SAMPLER, WET/DRY	301	Aerochem	883699	$	1,820.00	5
#####	PRK134	F-PUMP, VACUUM	107CA18	Thomas Pump		$	142.00	5
#####	PRK134	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	880439X	$	356.00	5
#####	PRK134	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000586	$	6,536.00	4
#####	PRK134	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
#####	PRK134	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	166.00	4
#####	PRK134	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$	340.00	4
#####	PRK134	F-CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis Corporation	000175	$	1,736.00	4
#####	PRK134	F-POWERSUPPLY, MFC	N/A	Mactec		$	114.00	4
#####	PRK134	M-SENSOR, WETNESS	58101	RM Young		$	278.00	5
#####	PRK134	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	227.00	4
#####	PRK134	M-SENSOR, TEMPERATURE	43347	RM Young	492036X	$	84.00	5
#####	PRK134	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$	325.00	4
#####	PRK134	M-MONITOR-AQ, WIND	05305	RM Young		$	504.00	5
#####	PRK134	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$	796.00	4
#####	PRK134	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000446	$	8,079.00	4
#####	PRK134	D-COMPUTER, LAPTOP	D630	Dell Computers	000478	$	1,314.00	4
#####	PRK134	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$	847.00	4
#####	PRK134	A-ANALYZER, OZONE	49I	Thermofisher	000690	$	5,787.00	4
#####	PRK134	D-DATA LOGGER	CR3000	Campbell Scientific	000411	$	3,026.00	4
#####	PRK134	D-COMPACT FLASH	NL115	Campbell Scientific		$	368.00	4
#####	PSU106	F-TOWER, FOLDING	AT-177	Aluma Tower	666324X	$	862.00	5
#####	PSU106	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$	930.00	4
#####	PSU106	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	484467X	$	402.00	5
#####	PSU106	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronics	492110X	$	570.00	5
#####	PSU106	M-TOWER, 10 METER	4-30	Universal Manufacture	666321X	$	372.84	5
#####	PSU106	M-SHIELD, TEMPERATURE	100325-10	Climatronics	492109X	$	475.00	5
#####	PSU106	S-UPS	BR900	APC		$	159.00	4
#####	PSU106	D-COMPACT FLASH	NL115	Campbell Scientific		$	368.00	4
#####	PSU106	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$	767.00	4
#####	PSU106	D-DATA LOGGER	CR3000	Campbell Scientific	000407	$	3,026.00	4
#####	PSU106	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
#####	PSU106	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
#####	PSU106	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$	398.00	4
#####	PSU106	D-COMPUTER, LAPTOP	D520	Dell Computers	000268	$	1,088.00	4
#####	PSU106	F-CONTROLLER, MASS FLOW	AX-MC-10SLPM-D	Apex	000527	$	1,318.00	4
#####	PSU106	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	166.00	5
#####	PSU106	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	PSU106	M-SENSOR, WETNESS	58101	RM Young		$	311.00	5
#####	PSU106	M-SENSOR, WIND DIRECTION	100076	Climatronics	810903X	$	451.00	5
#####	PSU106	M-SENSOR, WIND SPEED	100075-G3-H0	Climatronics		$	615.00	4
#####	PSU106	A-ANALYZER, OZONE	49I	Thermofisher	000684	$	5,784.00	4
#####	PSU106	A-ANALYZER, OZONE - SITE XFER STD.	49I	Thermofisher	000696	$	7,192.00	4
#####	PSU106	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$	796.00	4
#####	PSU106	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$	340.00	4
#####	PSU106	F-PUMP, VACUUM	107CAB18	Thomas Pump		$	180.00	4
#####	PSU106	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000560	$	1,190.00	4
#####	PSU106	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$	767.00	4
#####	PSU106	M-SENSOR, TEMPERATURE	41342	RM Young		$	110.00	4
#####	PSU106	F-PUMP, VACUUM	107CA18	Thomas Pump		$	120.00	5
#####	QAK172	M-TOWER, 10 METER	4-30	Universal Manufacture	666322X	$	372.84	5
#####	QAK172	M-SENSOR, TEMPERATURE	41342	RM Young		$	129.00	4
#####	QAK172	M-SHIELD, TEMPERATURE	43408	RM Young		$	404.64	5
#####	QAK172	F-TOWER, FOLDING B	AT-516	Aluma Tower	666368	$	1,070.00	5
#####	QAK172	S-SHELTER, 8X8X10, ALUM	8810	Ekto	666355	$	7,783.00	5
#####	QAK172	F-CONTROLLER, MASS FLOW	FC-280	Tylan		$	865.00	5
#####	QAK172	F-POWERSUPPLY, MFC	N/A	Mactec		$	208.00	4
#####	QAK172	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810051X	$	356.25	5
#####	QAK172	F-PUMP, VACUUM	107CA18	Thomas Pump		$	110.70	5
#####	QAK172	D-DATA LOGGER	CR3000	Campbell Scientific	000418	$	3,026.00	4
#####	QAK172	D-COMPACT FLASH	NL115	Campbell Scientific		$	368.00	4
#####	QAK172	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	217.00	4
#####	QAK172	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	QAK172	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$	847.00	4
#####	QAK172	M-SENSOR, TEMPERATURE	41342	RM Young		$	115.00	4
#####	QAK172	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronics		$	623.00	4
#####	QAK172	S-UPS	BR900	APC		$	180.00	4
#####	QAK172	M-MONITOR-AQ, WIND	05305	RM Young		$	504.00	5
#####	QAK172	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$	795.00	4
#####	QAK172	M-SENSOR, WETNESS	58101	RM Young		$	386.00	4
#####	QAK172	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000511	$	9,306.00	4
#####	QAK172	D-COMPUTER, LAPTOP	D530	Dell Computers	000456	$	1,177.00	4
#####	QAK172	A-ANALYZER, OZONE	49I	Thermofisher	000739	$	5,783.00	4
#####	QAK172	M-SHIELD, TEMPERATURE	43408	RM Young		$	404.64	5
#####	REP930	ANALYZER, OZONE	49I	Thermofisher	000685	$	5,784.00	4
#####	REP930	MULTIMETER, DIGITAL	287	Fluke	810102X	$	341.00	5
#####	ROM206	S-SHELTER, 8X8X10, ALUM	8810	Ekto	880674	$	7,256.00	5
#####	ROM206	F-TOWER, FOLDING B	AT-516	Aluma Tower	666369	$	1,070.00	5
#####	ROM206	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492155X	$	375.00	5
#####	ROM206	M-SENSOR, WETNESS	58101	RM Young		$	278.00	5
#####	ROM206	M-SENSOR, TEMPERATURE	43347	RM Young		$	98.80	5
#####	ROM206	M-TRANSLATOR, SOLAR RAD	70201	RM Young		$	424.00	4
#####	ROM206	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	247.00	4

#####	ROM206	F-FOLDING TOWER "D"		Aluma Tower	000810	$ 5,446.00	4
#####	ROM206	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 930.00	4
#####	ROM206	D-COMPUTER, LAPTOP	D530	Dell Computers	000454	$ 1,177.00	4
#####	ROM206	D-DATA LOGGER	CR3000	Campbell Scientific	000415	$ 3,026.00	4
#####	ROM206	A-COMPRESSOR, AIR	PC124E	Werther International	000532	$ 1,717.00	4
#####	ROM206	S-UPS	BR900	APC		$ 180.00	4
#####	ROM206	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000598	$ 1,190.00	4
#####	ROM206	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000437	$ 8,316.00	4
#####	ROM206	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	ROM206	A-ANALYZER, OZONE	49I	Thermofisher	000734	$ 5,782.00	4
#####	ROM206	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 174.00	4
#####	ROM206	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000621	$ 7,376.00	4
#####	ROM206	M-SHIELD, TEMPERATURE	43408	RM Young		$ 496.00	5
#####	ROM206	M-SHIELD, TEMPERATURE	43408	RM Young		$ 439.20	5
#####	ROM206	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	SAL133	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	SAL133	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	SAL133	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	SAL133	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000465	$ 1,252.00	4
#####	SAL133	M-SENSOR, WIND DIRECTION	100076	Climatronics	809381X	$ 451.25	5
#####	SAL133	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	SAL133	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
#####	SAL133	M-SENSOR, SOLAR RADIATION	101655	LiCor	809182X	$ 285.00	5
#####	SAL133	M-SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	SAL133	A-ANALYZER, OZONE	49I	Thermofisher	000741	$ 5,783.00	4
#####	SAL133	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	SAL133	D-COMPUTER, LAPTOP	D520	Dell Computers	000292	$ 1,088.00	4
#####	SAL133	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000372	$ 8,562.00	4
#####	SAL133	M-RAIN GAUGE, TIPPING BUCKET	100508-G1	Climatronics		$ 510.00	5
#####	SAL133	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 398.00	4
#####	SAL133	D-DATA LOGGER	CR3000	Campbell Scientific	000351	$ 3,020.00	4
#####	SAL133	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	SAL133	S-UPS	BR800	APC		$ 191.00	4
#####	SAL133	F-PUMP, VACUUM	107CA110	Thomas Pump	809336X	$ 73.00	5
#####	SAL133	F-TOWER, FOLDING B	AT-516	Aluma Tower	928377	$ 1,330.00	5
#####	SAL133	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811684	$ 5,558.00	5
#####	SAL133	M-SHIELD, TEMPERATURE	100325-10	Climatronics	880458X	$ 523.00	5
#####	SAL133	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronics	880459X	$ 570.00	5
#####	SAL133	M-TOWER, 10 METER	C-33	Aluma Tower	810094X	$ 498.00	5
#####	SAN189	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	SAN189	F-TOWER, FOLDING B	AT-516D	Aluma Tower	000207	$ 2,911.00	4
#####	SAN189	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 217.00	4
#####	SAN189	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
#####	SAN189	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492149X	$ 375.00	5
#####	SAN189	M-MONITOR-AQ, WIND	05305VM	RM Young		$ 944.00	4
#####	SAN189	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 795.00	4
#####	SAN189	D-COMPUTER, LAPTOP	D520	Dell Computers	000271	$ 1,088.00	4
#####	SAN189	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000444	$ 8,079.00	4
#####	SAN189	A-ANALYZER, OZONE	49I	Thermofisher	000740	$ 5,783.00	4
#####	SAN189	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	SAN189	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	SAN189	D-DATA LOGGER	CR3000	Campbell Scientific	000360	$ 3,020.00	4
#####	SAN189	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 180.00	4
#####	SAN189	F-CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis Corporation	000174	$ 1,736.00	4
#####	SAN189	M-SHIELD, TEMPERATURE	43408F	RM Young		$ 643.00	4
#####	SAN189	M-SHIELD, TEMPERATURE	43408F	RM Young		$ 643.00	4
#####	SAN189	M-SENSOR, WETNESS	58101	RM Young		$ 413.00	4
#####	SAN189	S-SHELTER, 8X8X10	E0810811	Shelter One	000222	$ 18,159.00	4
#####	SAN189	M-TOWER, 10 METER	4-30	Universal Manf.		$ 483.00	4
#####	SAN189	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	SC05	P-SAMPLER, WET/DRY	N/A	Loda Electronics	000135	$ 4,100.00	4
#####	SND152	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880745X	$ 432.00	5
#####	SND152	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$ 208.00	5
#####	SND152	M-TOWER, 10 METER	4-30	Universal Manufacture	492071X	$ 343.48	5
#####	SND152	M-SENSOR, WETNESS	58101	RM Young		$ 311.00	5
#####	SND152	M-MONITOR-AQ, WIND	05320	RM Young		$ 473.00	4
#####	SND152	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 795.00	4
#####	SND152	A-ANALYZER, OZONE - SITE XFER STD	49I	Therom Environmental	000215	$ 8,551.00	4
#####	SND152	D-COMPUTER, LAPTOP	D520	Dell Computers	000266	$ 1,088.00	4
#####	SND152	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	SND152	A-ANALYZER, OZONE	49I	Thermofisher	000725	$ 5,783.00	4
#####	SND152	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811952	$ 5,558.00	5
#####	SND152	F-PUMP, VACUUM	107CAB18	Thomas Pump		$ 142.00	4
#####	SND152	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	484469X	$ 402.00	5
#####	SND152	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000148	$ 2,627.00	4
#####	SND152	F-POWERSUPPLY, MFC	N/A	Mactec		$ 208.00	4
#####	SND152	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$ 622.00	4
#####	SND152	D-DATA LOGGER	CR3000	Campbell Scientific	000357	$ 3,020.00	4
#####	SND152	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 304.00	4
#####	SND152	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	SND152	M-SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	SND152	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	SND152	M-SHIELD, TEMPERATURE	43408	RM Young	880744X	$ 366.00	5
#####	SPB891	RELATIVE HUMIDITY TRANSFER	S-503-DIG-1	Process Measurment & Controls	000537	$ 5,892.00	4

#####	SPB891	SENSOR, TEMPERATURE	43347	RM Young	880412X	$	84.00	5
#####	SPB892	SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$	227.00	4
#####	SPB892	SENSOR, RELATIVE HUMIDITY	HYGROPALM 22	Rotronics		$	740.00	4
#####	SPB892	MONITOR-AQ, WIND	05320	RM Young		$	473.00	4
#####	SPB892	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	304.00	4
#####	SPB892	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	181.00	4
#####	SPB892	TRANSIT, POCKET	5006LM	Brunton		$	238.00	4
#####	SPB892	MOTOR, VARIABLE SYNC	18802	RM Young		$	815.00	4
#####	SPB892	SENSOR, WETNESS	58101	RM Young		$	278.00	5
#####	SPB892	RELATIVE HUMIDITY TRANSFER	S-503-DIG-1	Process Measurment & Controls	000536	$	5,892.00	4
#####	SPB892	SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$	342.00	4
#####	SPB893	TRANSIT, POCKET	5006LM	Brunton		$	238.00	4
#####	SPB893	RELATIVE HUMIDITY TRANSFER	S-503-DIG-1	Process Measurement & Controls	000476	$	5,887.00	4
#####	SPB893	TEST FIXTURE, WIND DIRECTION	101984	Climatronics		$	652.00	4
#####	SPB893	SENSOR, TEMPERATURE	43342B-01	RM Young		$	55.00	4
#####	SPB893	SENSOR, RELATIVE HUMIDITY	HMP50-UAB1A1A	Vaisala		$	227.00	4
#####	SPB893	SENSOR, WIND DIRECTION	100076	Climatronics	810030X	$	451.25	5
#####	SPB893	SENSOR, WETNESS	58101	RM Young		$	372.00	4
#####	SPB893	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
#####	SPB893	SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	166.00	4
#####	SPB893	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	SPB893	SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	215.00	4
#####	SPB893	MOTOR, VARIABLE SYNC	18802	RM Young		$	1,282.00	4
#####	SPB893	SENSOR, RELATIVE HUMIDITY	GTL	Rotronic		$	695.00	5
#####	SPD111	M-TOWER, 10 METER	4-30	Universal Manufacture	492059X	$	343.48	5
#####	SPD111	S-UPS	BR800	APC		$	191.00	4
#####	SPD111	M-SHIELD, TEMPERATURE	43408	RM Young	492328X	$	366.00	5
#####	SPD111	P-BALANCE, 3-BEAMED	1119D	Ohaus	492376X	$	375.00	5
#####	SPD111	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811700	$	5,679.00	5
#####	SPD111	F-TOWER, FOLDING	AT048	Aluma Tower	664746X	$	724.00	5
#####	SPD111	P-SAMPLER, WET/DRY	301	Aerochem	883508	$	1,820.00	5
#####	SPD111	F-PUMP, VACUUM	107CAB18	Thomas Pump		$	142.00	4
#####	SPD111	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492159X	$	375.00	5
#####	SPD111	M-SENSOR, TEMPERATURE	41342	RM Young		$	110.00	4
#####	SPD111	D-DATALOGGER	CR3000	Campbell Scientific	000342	$	3,020.00	4
#####	SPD111	D-COMPACT FLASH	NL115	Campbell Scientific		$	369.00	4
#####	SPD111	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$	847.00	4
#####	SPD111	P-PRECIPITATION GAUGE, W/ WIND SHIELD	NOAH IV	ETI Instruments	000583	$	6,691.00	4
#####	SPD111	M-SENSOR, WETNESS	58101	RM YOUNG		$	358.00	4
#####	SPD111	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
#####	SPD111	M-SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$	150.00	5
#####	SPD111	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000459	$	1,225.00	4
#####	SPD111	M-MONITOR-AQ, WIND	05305VM	RM Young		$	667.00	4
#####	SPD111	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000515	$	9,316.00	4
#####	SPD111	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$	796.00	4
#####	SPD111	D-COMPUTER, LAPTOP	D520	Dell Computers	000265	$	1,088.00	4
#####	SPD111	A-ANALYZER, OZONE	49I	Thermofisher	000676	$	5,784.00	4
#####	SPD111	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	492330X	$	432.00	5
#####	SRA995	ZERO AIR SYSTEM	701H	Teledyne API	000774	$	6,728.00	4
#####	SRA995	METER, BUBBLE-FLOW CALIBR	HBM-1A	Teledyne Hastings	809437X	$	695.00	5
#####	SRA995	ZERO AIR SYSTEM	701H	Teledyne API	000777	$	6,728.00	4
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	372.00	4
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	166.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	272.00	5
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	247.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70201	RM Young		$	428.00	4
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	217.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	SRB994	COMPUTER, LAPTOP	D610	Dell Computers	000235	$	1,879.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	284.00	5
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	215.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	304.00	4
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$	166.00	4
#####	SRB994	PYRANOMETER	LP02	Huksefluk		$	895.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$	166.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
#####	SRB994	SYSTEM, FLOW	1300-C	Atec	492684	$	5,387.00	5
#####	SRB994	SHELTER, 8X8X10, ALUM	8810	Ekto	483917	$	6,040.00	5
#####	SRB994	STAIRCASE, SHELTER	N/A	Ekto	483921	$	1,640.00	5
#####	SRB994	SYSTEM, FLOW	1300-C	Atec	492671	$	5,387.00	5
#####	SRB994	MONITOR, PC 15"	1556	Victory Electronics		$	105.00	4
#####	SRB994	COMPUTER, PII-450	GX1	Dell	000110	$	2,000.00	5
#####	SRB994	DATA LOGGER	CR3000	Campbell Scientific	000331	$	3,020.00	4
#####	SRB994	COMPACT FLASH	NL115	Campbell Scientific		$	369.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	337.00	4
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	SRB994	SENSOR, SOLAR RADIATION	LI-200SB	LiCor		$	150.00	5
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	258.72	5
#####	SRB994	SENSOR, SOLAR RADIATION	101655	LiCor	492116X	$	285.00	5
#####	SRB994	TRANSLATOR, SOLAR RAD	70101X	RM Young		$	304.00	4
#####	STK138	D-COMPACT FLASH	NL115	Campbell Scientific		$	368.00	4

#####	STK138	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	STK138	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	STK138	M-MONITOR-AQ, WIND	05320	RM Young		$ 473.00	4
#####	STK138	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	STK138	D-COMPUTER, LAPTOP	D520	Dell Computers	000248	$ 1,088.00	4
#####	STK138	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000450	$ 8,079.00	4
#####	STK138	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000610	$ 7,372.00	4
#####	STK138	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880516X	$ 432.00	5
#####	STK138	M-TOWER, 10 METER	4-30	Universal Manufacture	492068X	$ 343.48	5
#####	STK138	F-TOWER, FOLDING	AT048	Aluma Tower	492222X	$ 694.00	5
#####	STK138	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811697	$ 5,679.00	5
#####	STK138	M-SHIELD, TEMPERATURE	43408	RM Young		$ 439.20	5
#####	STK138	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	STK138	F-POWERSUPPLY, MFC	N/A	Mactec		$ 156.00	4
#####	STK138	F-CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis	000238	$ 1,727.00	4
#####	STK138	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	STK138	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	STK138	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 351.00	4
#####	STK138	D-DATA LOGGER	CR3000	Campbell Scientific	000349	$ 3,020.00	4
#####	STK138	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
#####	STK138	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 372.00	4
#####	STK138	D-MODEM, DIGITAL - RAVEN X HSDPA	H4222-C	Airlink		$ 767.00	4
#####	SUM156	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000665	$ 1,189.00	4
#####	SUM156	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	SUM156	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
#####	SUM156	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	SUM156	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	SUM156	A-ANALYZER, OZONE	49I	Thermofisher	000724	$ 5,789.00	4
#####	SUM156	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Environmental	000329	$ 8,551.00	4
#####	SUM156	F-TOWER, FOLDING	AT048	Aluma Tower	880486X	$ 625.00	5
#####	SUM156	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811687	$ 5,638.00	5
#####	SUM156	M-TOWER, 10 METER	4-30	Universal Manufacture	492072X	$ 343.48	5
#####	SUM156	S-SYSTEM, LIGHTNING PROTECTION	501-4983-20	LEA Dynatech		$ 879.95	5
#####	SUM156	P-SAMPLER, WET/DRY	301	Aerochem	883645	$ 1,820.00	5
#####	SUM156	F-PUMP, VACUUM	107CA18	Thomas Pump	492258X	$ 92.31	5
#####	SUM156	P-BALANCE, WEIGHING	25KGC0	Ohaus		$ 628.00	4
#####	SUM156	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	SUM156	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 301.00	5
#####	SUM156	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 247.00	4
#####	SUM156	D-DATA LOGGER	CR3000	Campbell Scientific	000335	$ 3,020.00	4
#####	SUM156	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	SUM156	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000577	$ 6,011.00	4
#####	SUM156	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	811511X	$ 356.00	5
#####	SUM156	D-COMPUTER, LAPTOP	D520	Dell Computers	000323	$ 1,088.00	4
#####	SUM156	S-UPS	BR900	APC		$ 180.00	4
#####	SUM156	D-CELLULAR AMP	DA400	Digital Anj		$ 244.00	4
#####	UND002	D-MODEM, CELLULAR	AIRLINK GX440	Mobile Pro Wireless		$ 823.00	4
#####	UND002	D-DATA LOGGER	CR850-ST-SW-NC	Campbell Scientific, Inc.	000802	$ 1,845.00	4
#####	UND002	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000593	$ 1,190.00	4
#####	UND002	M-SENSOR, TEMPERATURE	41342	RM Young		$ 294.00	4
#####	UND002	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000778	$ 3,610.00	4
#####	UVL124	P-BALANCE, 3-BEAMED	1119D	Ohaus	492188X	$ 702.95	5
#####	UVL124	M-TOWER, 10 METER	4-30	Universal Manufacture		$ 276.48	5
#####	UVL124	P-SAMPLER, WET/DRY	301	Aerochem	883497	$ 1,820.00	5
#####	UVL124	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	492157X	$ 375.00	5
#####	UVL124	F-PUMP, VACUUM	107CA18	Thomas Pump		$ 120.00	5
#####	UVL124	D-COMPUTER, LAPTOP	D520	Dell Computers	000294	$ 1,088.00	4
#####	UVL124	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000576	$ 5,816.00	4
#####	UVL124	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 274.89	5
#####	UVL124	M-SENSOR, SOLAR RADIATION	LI-200SZ	LiCor		$ 181.00	4
#####	UVL124	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	UVL124	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	UVL124	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
#####	UVL124	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	UVL124	D-DATA LOGGER	CR3000	Campbell Scientific	000423	$ 3,026.00	4
#####	UVL124	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	UVL124	M-SENSOR, WETNESS	58101	RM Young		$ 312.00	5
#####	UVL124	M-MONITOR-AQ, WIND	05305VM	RM Young		$ 872.00	4
#####	UVL124	A-ANALYZER, OZONE	49I	Thermofisher	000745	$ 5,783.00	4
#####	UVL124	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	UVL124	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000365	$ 8,318.00	4
#####	UVL124	M-SHIELD, TEMPERATURE	43408	RM Young	880654X	$ 366.00	5
#####	UVL124	F-POWERSUPPLY/READOUT, FLOW	CPR-1A	Teledyne Hastings	811882X	$ 625.50	5
#####	UVL124	F-CONTROLLER, MASS FLOW	CST-10K	Teledyne Hastings	811875X	$ 715.50	5
#####	UVL124	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810738	$ 5,708.00	5
#####	UVL124	F-TOWER, FOLDING	AT048	Aluma Tower	810862X	$ 559.00	5
#####	UVL124	S-UPS	BR800	APC		$ 191.00	4
#####	VIN140	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	VIN140	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	VIN140	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	VIN140	D-DATA LOGGER	CR3000	Campbell Scientific	000358	$ 3,020.00	4
#####	VIN140	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 152.00	5
#####	VIN140	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 284.00	5
#####	VIN140	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4

#####	VIN140	M-SENSOR, WIND DIRECTION	100076	Climatronics	808792X	$ 404.00	5
#####	VIN140	M-SENSOR, RELATIVE HUMIDITY	HMP50	Vaisala		$ 227.00	4
#####	VIN140	M-SENSOR, WIND SPEED	100075	Climatronics	810064X	$ 451.25	5
#####	VIN140	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	VIN140	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000435	$ 8,316.00	4
#####	VIN140	D-COMPUTER, LAPTOP	D520	Dell Computers	000246	$ 1,088.00	4
#####	VIN140	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000657	$ 1,189.00	4
#####	VIN140	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000630	$ 7,382.00	4
#####	VIN140	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	VIN140	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000137	$ 2,480.00	4
#####	VIN140	F-PUMP, VACUUM	107CAB18	Thomas Pumps		$ 167.00	4
#####	VIN140	S-SHELTER, 8X8X10, ALUM	8810	Ekto	810755	$ 5,000.00	5
#####	VIN140	M-TOWER, 10 METER	C-33	Aluma Tower	810090X	$ 498.00	5
#####	VIN140	M-SHIELD, TEMPERATURE	100325-10	Climatronics	810060X	$ 688.75	5
#####	VIN140	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	810058X	$ 830.30	5
#####	VIN140	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810062X	$ 356.25	5
#####	VPI120	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	VPI120	M-SHIELD, RELATIVE HUM/TEMP	100325-10R	Climatronicsa	809191X	$ 523.00	5
#####	VPI120	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
#####	VPI120	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
#####	VPI120	M-SENSOR, SOLAR RADIATION	70201	RM Young		$ 208.00	4
#####	VPI120	D-DATA LOGGER	CR3000	Campbell Scientific	000402	$ 3,026.00	4
#####	VPI120	D-COMPUTER, LAPTOP	D520	Dell Computers	000286	$ 1,088.00	4
#####	VPI120	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000590	$ 5,863.00	4
#####	VPI120	M-SENSOR, WIND DIRECTION	100076	Climatronics		$ 610.00	4
#####	VPI120	F-PUMP, VACUUM	107CA18	Thomas Pump	811518X	$ 90.00	5
#####	VPI120	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Aepx	000640	$ 1,189.00	4
#####	VPI120	M-SENSOR, WIND SPEED	100075	Climatronics		$ 610.00	4
#####	VPI120	A-ANALYZER, OZONE	49I	Thermofisher	000702	$ 5,787.00	4
#####	VPI120	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 796.00	4
#####	VPI120	M-SENSOR, RELATIVE HUMIDITY	102425	Vaisala		$ 398.00	4
#####	VPI120	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000631	$ 3,773.00	4
#####	VPI120	D-MODEM, EXTERNAL	COM-220	Campbell Scientific		$ 340.00	4
#####	VPI120	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000442	$ 8,316.00	4
#####	VPI120	D-COMPACT FLASH	NL115	Campbell Scientific		$ 368.00	4
#####	VPI120	M-RAIN GUAGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 625.00	4
#####	VPI120	M-SENSOR, WETNESS	58101	RM Young		$ 311.00	5
#####	VPI120	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000315	$ 2,350.00	4
#####	VPI120	M-TOWER, 10 METER	C-33	Aluma Tower	810016X	$ 646.00	5
#####	VPI120	S-SHELTER, 8X8X10, ALUM	8810	Ekto	809163	$ 5,000.00	5
#####	VPI120	M-SHIELD, TEMPERATURE	100325-10	Climatronics	809190X	$ 475.00	5
#####	VPI120	M-SENSOR, TEMPERATURE	43342B-01	RM Young		$ 55.00	4
#####	WA21	P-PRECIPITATION GAUGE	NOAH IV	ETI Instruments	000563	$ 5,872.00	4
#####	WFM105	D-MODEM, CELLULAR	AIRLINK GX440	Mobile Pro Wireless		$ 928.00	4
#####	WFM105	D-DATA LOGGER	CR850-ST-SW-NC	Campbell Scientific, Inc.	000803	$ 1,845.00	4
#####	WFM105	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000595	$ 1,190.00	4
#####	WFM105	M-SENSOR, TEMPERATURE-TRANSLATOR	41342VC	RM Young		$ 342.00	4
#####	WFM105	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000784	$ 3,610.00	4
#####	WSP144	M-RAIN GAUGE, TIPPING BUCKET	100508-2	Climatronics	810228X	$ 356.25	5
#####	WSP144	M-SENSOR, RELATIVE HUMIDITY	MP101A-C4	Rotronic		$ 759.00	4
#####	WSP144	D-COMPACT FLASH	NL115	Campbell Scientific		$ 369.00	4
#####	WSP144	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	WSP144	D-DATA LOGGER	CR3000	Campbell Scientific	000430	$ 3,026.00	4
#####	WSP144	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	WSP144	M-SENSOR, SOLAR RADIATION	101655	LiCor	880719X	$ 285.00	5
#####	WSP144	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 337.00	4
#####	WSP144	M-MONITOR-AQ, WIND	05305	RM Young		$ 667.00	4
#####	WSP144	M-SENSOR, WETNESS	58101	RM Young		$ 278.00	5
#####	WSP144	A-COMPRESSOR, AIR	PC70/4	Werther International Inc.		$ 795.00	4
#####	WSP144	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000445	$ 8,319.00	4
#####	WSP144	D-COMPUTER, LAPTOP	D520	Dell Computers	000243	$ 1,088.00	4
#####	WSP144	F-PUMP, VACUUM	107CA110	Thomas Pump		$ 116.95	5
#####	WSP144	F-TOWER, FOLDING B	AT-516D-1	Aluma Tower	000126	$ 1,394.00	4
#####	WSP144	M-TOWER, 10 METER	4-30	Universal Manufacture	492065X	$ 343.48	5
#####	WSP144	M-SHIELD, TEMPERATURE	43408	RM Young	880767X	$ 366.00	5
#####	WSP144	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880768X	$ 432.00	5
#####	WSP144	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811949	$ 5,258.00	5
#####	WSP144	S-UPS	BR900	APC		$ 159.00	4
#####	WSP144	A-ANALYZER, OZONE	49I	Thermofisher	000742	$ 5,783.00	4
#####	WSP144	M-SENSOR, TEMPERATURE	41342	RM Young		$ 136.00	4
#####	WSP144	F-CONTROLLER, MASS FLOW	AX-MC-SSLPM-D	Apex	000639	$ 1,189.00	4
#####	WST109	F-TOWER, FOLDING	AT048	Aluma Tower	880483X	$ 625.00	5
#####	WST109	M-SENSOR, TEMPERATURE	41342	RM Young		$ 129.00	4
#####	WST109	M-SHIELD, TEMPERATURE	43408	RM Young	880761X	$ 366.00	5
#####	WST109	M-TOWER, 10 METER	4-30	Universal Manufacture	492070X	$ 343.48	5
#####	WST109	S-SHELTER, 8X8X10, ALUM	8810	Ekto	811692	$ 5,638.00	5
#####	WST109	M-SENSOR, RELATIVE HUMIDITY	MP-101A-C4	Rotronic		$ 807.00	4
#####	WST109	M-SENSOR, WETNESS	58101	RM Young		$ 312.00	5
#####	WST109	D-DATA LOGGER	CR3000	Campbell Scientific	000427	$ 3,026.00	4
#####	WST109	D-COMPACT FLASH	NL115	Campbell Scientific		$ 409.00	4
#####	WST109	D-MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 767.00	4
#####	WST109	M-SENSOR, TEMPERATURE	43347	RM Young	492030X	$ 84.00	5
#####	WST109	F-CONTROLLER, MASS FLOW	AX-MC-5SLPM-D	Apex	000466	$ 1,252.00	4
#####	WST109	M-MONITOR-AQ, WIND	05305-5	RM Young		$ 822.00	4

#####	WST109	S-UPS	BR900	APC		$ 168.00	4
#####	WST109	M-RAIN GAUGE, TIPPING BUCKET	TR-525I	Texas Electronics		$ 349.00	4
#####	WST109	M-SENSOR, SOLAR RADIATION	LI-200SA	LiCor		$ 247.00	4
#####	WST109	M-TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.72	5
#####	WST109	A-COMPRESSOR, AIR	PC70/4	Werther International Inc		$ 794.00	4
#####	WST109	A-ANALYZER, OZONE - SITE XFER STD	49I	Thermo Fisher	000371	$ 8,555.00	4
#####	WST109	A-ANALYZER, OZONE	49I	Thermo Fisher Scientific Corporation	000611	$ 7,372.00	4
#####	WST109	D-COMPUTER, LAPTOP	D520	Dell Computers	000291	$ 1,088.00	4
#####	WST109	F-PUMP, VACUUM	107CA18	Thomas Pump	811579X	$ 90.00	5
#####	WST109	M-SHIELD, RELATIVE HUM/TEMP	43409	RM Young	880762X	$ 432.00	5
#####	XFR962	POWERSUPPLY, MFC	N/A	Mactec		$ 195.00	4
#####	XFR962	CONTROLLER, MASS FLOW	FC-280 SAV	Mykrolis	000233	$ 1,698.00	4
#####	XFR962	POWERSUPPLY, MFC	N/A	Mactec		$ 156.00	4
#####	XFR962	POWERSUPPLY, MFC	N/A	Mactec		$ 199.00	4
#####	XFR962	SENSOR, TEMPERATURE	41342	RM Young		$ 115.00	4
#####	XFR962	POWERSUPPLY, MFC	N/A	Mactec		$ 208.00	4
#####	XFR962	POWERSUPPLY/READOUT, FLOW	RO-32	Tylan		$ 566.00	5
#####	XFR962	CONTROLLER, MASS FLOW	FC-260	Tylan		$ 752.00	5
#####	XFR964	UPS	BR900	APC		$ 159.00	4
#####	XFR964	PUMP, VACUUM	107CA18	Thomas Pump	880388X	$ 90.00	5
#####	XFR964	MODEM, DIGITAL - RAVEN X CDMA	V4221-V	Airlink		$ 847.00	4
#####	XFR964	COMPUTER, LAPTOP	E6420	Dell	000753	$ 1,217.00	4
#####	XFR964	CAMERA, DIGITAL	S6100	Nikon		$ 282.00	4
#####	XFR964	TOWER, FLOW	S-480TWC	Upright	923280	$ 9,646.00	5
#####	XFR964	PUMP, VACUUM	107CA18	Thomas Pump	880389R	$ 90.00	5
#####	XFR964	TRANSLATOR, SOLAR RAD	70101X	RM Young		$ 258.40	5
#####	XFR964	ANALYZER, SO2	43S	Teco	923320	$ 11,372.00	5

ATTACHMENT 4

REPORTING REQUIREMENTS

REPORTING REQUIREMENTS

I. Contract Reporting Requirements

The reports listed in the table below shall be prepared by the contractor and distributed to the designated recipient(s) in accordance with each specified requirement. Each report shall cite the contract number, identify the U.S. Environmental Protection Agency as the sponsoring agency, and identify the name of the contractor preparing the report. Unless otherwise noted, all reports are to be submitted electronically in a searchable PDF format. A detailed description of each required report follows the table.

The contractor shall deliver required reports to the identified recipients in accordance with the following schedule:

Name of Report	**Due Date**	**Recipient(s)**
Monthly Technical Progress Reports	Within 15 business days after the end of each billing	CO, COR, ACOR
Monthly Financial Reports	Within 15 business days after the end of each billing	CO, COR, ACOR
Monthly Program-Specific and Site-Specific Cost Accounting Reports	Within 15 business days after the end of each billing	CO, COR, ACOR
Monthly invoice database	Within 30 business days after the end of each billing period	COR, ACOR
Quality Assurance Project Plans and Contract Level Quality Management Plan	As directed by the COR or TOCOR (Technical Direction)	CO, COR, ACOR, TOCOR, QAM
Quality Assurance Quarterly Report	Within 120 days after each calendar quarter	CO, COR, ACOR,
Quarterly Data Summary	Within 120 days after each calendar quarter	CO, COR, ACOR
Other Reports (See Section E below.)	As directed by the COR or TOCOR (Technical Direction)	CO, COR, ACOR, TOCOR

CO = Contracting Officer
COR = Contract-Level Contracting Officer's Representative
ACOR = Alternate Contract-Level Contracting Officer's Representative
TOCOR = Task Order Contracting Officer's Representative
QAM = Quality Assurance Manager

II. Required Reports

A. Monthly Technical Progress Reports

The contractor shall submit Monthly Technical Progress Reports to the COR and the CO within 15 business days after the end of each billing cycle. The Monthly Technical Progress Reports shall include all the information required by EPAAR 1552.211-72 Monthly Progress Report (Tailored) contained in this contract.

The contractor shall deliver to the EPA a monthly progress report summarizing the network operation and maintenance activity for the prior month. At a minimum, the monthly progress report shall describe: any significant events or changes to the network that would affect interpretations of results; site activity; quality assurance procedures; data management; monthly billing (in excel format); and any issues or limitations in using the data.

The contractor shall deliver to the EPA an annual report summarizing the network for the prior calendar year. At a minimum, the annual report shall describe: the status of the network; any significant events or changes to the network that would affect interpretations of results; results and significant findings of the network; the quality of data produced by the program; any issues or limitations in using the data. A draft of the annual progress report is due electronically on October 1st of the following year. The contractor shall deliver a final report 30 days after final comments are received from EPA. A final dataset, including any model runs and annual summary data shall be delivered to EPA electronically with the draft report.

B. Monthly Financial Progress Reports

The contractor shall submit Monthly Financial Progress Reports to the COR and the CO within 15 business days after the end of each billing cycle. The Monthly Financial Progress Reports shall include the all information required by EPAAR 1552.211-72 Monthly progress report (tailored) included in this contract.

C. Monthly Program-Specific and Site-Specific Cost Accounting Reports

The contractor shall submit both the program-specific and site-specific cost accounting reports to the Contracting Officer's Representative within 15 business days after the end of each billing cycle.

The contractor shall be responsible for maintaining records and reporting all contract costs incurred by EPA program. Program specific accounting shall be broken down by number of active TOs, current and cumulative labor hours, current and cumulative labor costs, current and cumulative materials costs, and current and cumulative total costs.

D. Monthly Invoice Database

The contractor shall submit all contract costs incurred by EPA during the billing cycle in an electronic format agreed upon by the contractor at the COR. The accounting shall be broken down by labor hours, materials, equipment, travel, individual land leases.

E. Quality Assurance Project Plans

As specified in FAR 52.246-11 (Feb 1999), Higher-Level Contract Requirement (Government Specification), the contractor shall prepare QA Project Plans (QAPPs) based on Regional requirements. Copies of contractor QAPP shall be submitted to the Contracting Officer's Representative and the EPA Regional QA Manager for review and written approval in accordance with contract and TO requirements by October 1st each contract period. The contractor's QAPP shall describe specific procedures and responsibilities needed to accomplish the QA specifications in the task order level SOW.

As necessary, QAPPs shall be updated by the contractor to reflect changes in procedures. Such changes shall be subject to Contracting Officer's Representative approval.

F. Quarterly QA Report

The contractor shall deliver a quarterly QA report electronically within 120 days after each calendar quarter. The 4th Quarter report shall be a summary of the previous calendar year. The quarterly reports will describe and summarize any systematic data quality issues and remedial actions taken during the quarter. The QA report shall summarize the current status of the network in respect to the CASTNET quality control indictors. Ozone quality assurance data shall be reported using the criteria in 40 CFR.

G. Quarterly Data Summary

A valid data set with corresponding precision and accuracy data shall be delivered to EPA via electronic transmission within 120 days after each calendar quarter. Each data set will be accompanied by a summary report which shall include network-wide spatial patterns, changes in measurement levels, and any significant changes at individual sites.

H. Other Reports

The contractor shall design, obtain Contracting Officer's Representative approval, and deliver such other reports at the direction of the Contracting Officer's Representative or as may be necessary to the execution and monitoring of activities under this contract in accordance with the contract scope of work.

Examples of other reports may include, but are not limited to the

following: Weekly Activities Report(s)/Meetings

The contractor shall submit a weekly activities report that provides the status of work in progress and/or planned activities for each active task order. (NOTE: Contractor team members may be required to attend weekly meetings during routine working hours.) The content and format for this report will be described in the task order requirements. Updates may be required on a daily basis for high visibility projects.

Technical Reports

Documents/reports required in the performance of contract activities shall be submitted by the contractor as defined in TOs, SOPs and/or through technical direction.

I. Report Distribution

The contact information and mailing addresses for the individuals listed below is included in the Section G contract clause titled, Contract Administration Representatives. Specific recipient names and addresses are subject to change during the term of the contract. The contractor will be notified by the COR and/or CO when these changes occur.

(1) Contracting Officer's Representative (COR)

(2) Alternate Contracting Officer's Representative (Alt COR)
(3) Contracting Officer (CO)
(4) Regional QA Manager (For QA Project Plans only)

Labor Category Qualifications

Title of Labor Category	Knowledge, Skills, Ability	Minimum Education	Minimum Experience	Allowable Substitution of Experience for Education
Principal Engineer/Scientist	▸ Must possess the abilities and skills necessary to manage multiple, technically difficult projects. Has skills necessary to develop, review and sign off on reports. Has technical background, knowledge and experience to represents the company with clients and at technical forums. ▸ May possess professional registration or certification.	BS or MS Engineering, Science or related technical field; professional registration or certification a plus.	15 years of related experience	2 years post BS experience = MS
Principal Engineer/Scientist QA	▸ Has a thorough understanding of QA procedures and processes. Can organize and prepare QA management plans and project plans. Has the skills necessary to independently evaluate, select and apply techniques and procedures to evaluate QA measures from a statistical perspective for field, laboratory and data management perspectives. Provides independent review and feedback on project QA performance to upper management and to project managers. Provides guidance to Senior Scientist 2 QA ▸ May possess professional registration or certification.	BS or MS Engineering, Science or related technical field; professional registration or certification a plus	15 years of related experience	2 years post BS experience = MS
Senior Associate Engineer/Scientist 2	▸ Has technical skills that enable them to lead groups with specific areas of expertise. Has the technical knowledge and expertise to serve as a subject matter expert for specific task(s) under broader more complex projects. For some projects will be responsible for all aspects of project management. Has the knowledge and skills to ensure project QC activities are in place and followed. Ability to provide leadership to the project team and senior-level technical expertise for one or more specific project areas. May act as the primary interface with clients for assigned projects. Has the ability to serve as Project Manager on complex technical projects. ▸ May possess professional registration or certification.	BS or MS Engineering, Science, Business, or related technical field; professional registration or certification a plus.	15 years of related experience	2 years post BS experience = MS
Senior Associate Scientist 1	▸ Has management and/or business skills that enable them to be responsible for all aspects of project management for projects of broad scope and impact. Uses knowledge of QA/QC to ensure that project QC activities are in place and followed. Provides leadership to project team and senior-level technical expertise in specific areas. Has the ability to serve as Project Manager on complex technical projects. Has the knowledge and skills to be recognized internally and externally as a technical expert.	BS or MS Engineering, Science or Business or related technical field	15 years of related experience	2 years post BS experience = MS

Labor Category Qualifications

Title of Labor Category	Knowledge, Skills, Ability	Minimum Education	Minimum Experience	Allowable Substitution of Experience for Education
Associate Engineer/Scientist	▸ Has the knowledge to manage and supervise medium to large groups of staff or exercise authority over a small group of highly professional personnel engaged in complex technical applications. Has technical skills and ability necessary to lead large consulting projects. ▸ May possess professional registration or certification.	BS or MS Engineering, Science or related technical field; professional registration or certification a plus.	15 years of related experience	2 years post BS experience = MS
Senior Software Engineer	▸ Has knowledge of database design, software programming, including an understanding of a variety of programming languages and data query languages and tools. Can design and create databases and data warehouses. Provides technical direction to application development and production operations staff with regards to database design, development and technical problem resolution. Has the skills to design/write scripts/supporting data extraction, transformation and loading (ETL) required for custom and ad-hoc reporting in enterprise-wide areas.	BS in Computer Science or IT	7 years minimum of applicable work experience	Equivalent combination of education and experience or 8 minimum years in working with the operations of complex databases, data modeling and data warehouses 2 yr experience = AA/AS 4 yr experience = BS 6 yr experience = MS
Software Engineer	▸ Possesses sufficient programming skills necessary to develop computer code for components of projects while ensuring adherence to programming standards and documentation. Skills include development of solutions and writing of detailed program requirements and specifications. Writes code, tests, debugs, documents and deploys custom applications and database systems and their components.	BS in Computer Science or Information Technology	2 years minimum work experience	Associate's degree in Computer Science or Information Technology and 4 minimum years of experience or 8 minimum years directly related full-time work experience. 2 yr experience = AA/AS 4 yr experience = BS 6 yr experience = MS
Senior Engineer/Scientist 3	▸ Has the knowledge and skills necessary to lead or manage tasks on large and/or technically complex projects with minimal oversight. Has the ability to prepare and conduct technical reviews of staff, reports and calculations. Manages specific elements of projects; Produces non-routine plans and reports. May review and approve work performed by Senior Engineer/Scientist 1 and 2 personnel. ▸ May possess professional registration or certification	BS or MS Engineering, Science or related technical field; professional registration or certification a plus.	10 years of related experience with BS	8 years of related experience with MS
Senior Engineer/Scientist 2	▸ Has the knowledge and skills necessary to perform significant components of work on tasks on large and/or technically complex projects with minimal oversight. Has the ability to prepare reports, calculations and analyses for project tasks. Produces non-routine plans and report sections. ▸ Directs and supervises technical assignments.	BS or MS Engineering, Science or related technical field; professional registration or certification a plus.	10 years of related experience with BS Engineer in Training (EIT) for engineers	8 years of related experience with MS Engineer in Training (EIT) for engineers

Labor Category Qualifications

Title of Labor Category	Knowledge, Skills, Ability	Minimum Education	Minimum Experience	Allowable Substitution of Experience for Education
Senior Engineer/Scientist 1	▸ Has the knowledge and skills necessary to perform work on tasks on large and/or technically complex projects with minimal oversight. Has the ability to prepare reports, calculations and analyses for project tasks. Produces non-routine plans and report sections. ▸ Directs and supervises technical assignments.	BS or MS Engineering, Science or related technical field; professional registration or certification a plus.	5 years of related experience with BS EIT for engineers	3 years of related experience with MS
Senior Scientist 2 QA	▸ Has knowledge of QA standards and applicability. Produces QA management plans, project plans and standard operating procedures for review and approval by Principal Engineer/Scientist QA. Has the skills necessary to independently evaluate, select and apply techniques and procedures to perform technical tasks, field studies and analysis with on-going review from project management staff. Provides guidance to field, data and lab personnel.	BS or MS Engineering, Science or related technical field; professional registration or certification a plus.	10 years of related experience with BS	8 years of related experience with MS
Professional Engineer/Scientist 3	▸ Has the ability and knowledge to independently evaluate, select and apply techniques and procedures to perform technical tasks, field studies and data analysis with on-going review from project management. Supervises field technicians. Develops procedures and modifies instrumentation necessary to support special studies and analyses. Provides guidance to field and data personnel.	BS or MS Engineering, Science or related technical field	3 plus years of related experience with BS EIT for engineers	1 years of related experience with MS EIT for engineers
Professional Engineer/Scientist 2	▸ Has knowledge and experience with complex instrumentation ▸ Has the ability and skills necessary to perform field exploration, inspection, analysis; provides technical support with supervision. Acts as a data gatherer; prepares maps, charts; runs simple computer programs. Performs field testing; uses equipment and instrumentation.	AS, BS or MS Engineering, Science or related technical field	1-3 years of related experience with BS EIT for engineers	4 years of experience = BS 2 years post BS experience = MS EIT for engineers
Professional Engineer/Scientist 1	▸ Has the skills necessary to performs field exploration, inspection and analysis; provides technical support with supervision. Acts as a data gatherer; prepares maps, charts; runs simple computer programs. Performs field testing; uses equipment and instrumentation.	AS, BS or MS Engineering, Science or related technical field	0-2 years of related experience EIT for engineers	4 years of experience = BS 2 years post BS experience = MS
Technician 4	▸ Has knowledge sufficient to perform assignments which are generally complex or of a non-routine nature. May gather and prepare cost estimates for proposals for routine programs of work, equipment purchases and/or field studies. Prepares draft sections of reports and standard operating procedures related to investigations, testing programs, inspection or analysis. Performs field testing; uses equipment and instrumentation. May supervise up to 12 other technicians.	High School Diploma, AA or AS degree	12 years of related experience.	2 years of experience = AA/AS
Technician 3	▸ Has skills and ability to solve problems requiring some professional judgment. May supervise the work of up to five technicians and may deal directly with clients on routine matters. Performs field testing; uses equipment and instrumentation. Works under limited supervision.	High School Diploma	7 years of related experience.	2 years of experience = AA/AS

Labor Category Qualifications

Title of Labor Category	Knowledge, Skills, Ability	Minimum Education	Minimum Experience	Allowable Substitution of Experience for Education
Technician 2	▸ Performs a wide variety of simple tests or procedures, routine analysis or calculations to check accuracy, applicability and reasonableness of data. Writes daily reports. Performs field testing; uses equipment and instrumentation.	High School Diploma	2-5 years of related experience;	2 years of experience = AA/AS
Technician 1	▸ Performs standard and some non-standard tests. Collects data. Performs routine and some non-routine calculations and measurements. Writes daily reports. Performs field testing; uses equipment and instrumentation.	High School Diploma	0-2 years of related experience;	2 years of experience = AA/AS
Administrative Staff 5	▸ Has an intimate knowledge of procurement and subcontracting systems. Uses this ability to award subcontracts and/or purchase orders for services and commodities for offices assigned by supervisor; enters purchase orders into purchasing system. Resolves routine discrepancies arising from subcontractors' performance. ▸ Possesses excellent knowledge and skills with word processing, spreadsheet and other computer programs.	High school diploma, additional business and/or computer courses	4-7 years of experience	2 years of experience = AA/AS
Administrative Staff 4	▸ Writes material for reports, manuals, proposals and related technical and administrative publications. Reviews and edits documents for format, logic, organization, consistency, grammar and punctuation. ▸ Possesses excellent knowledge and skills with word processing, spreadsheet and other computer programs.	High school diploma, additional business and/or computer courses	2- 4 years of experience	2 years of experience = AA/AS
Administrative Staff 3	▸ Project Tracking and Control - Compiles and accurately tracks financial information on a task level for review by project management to effectively and profitably manage the project. ▸ Possesses excellent knowledge and skills with word processing, spreadsheet and other computer programs.	High school diploma, additional business and/or computer courses	1-2 years of experience	2 years of experience = AA/AS
Administrative Staff 2	▸ Maintains files and records for projects, invoices, correspondence, etc. Compiles data used in preparing reports. Operates office equipment and basic software applications to produce typewritten material, drawings, graphs, etc. Enters information into computer databases; performs searches; runs reports. ▸ Possesses excellent knowledge and skills with word processing, spreadsheet and other computer programs.	High school diploma, additional business and/or computer courses	1 year or less experience.	2 years of experience = AA/AS
Administrative Staff 1	▸ Provides clerical and administrative support to a group of management/professional employees and to manage the administrative aspects of one or more options. ▸ Possesses excellent knowledge and skills with word processing, spreadsheet and other computer programs.	High school diploma	Little or no business experience required.	2 years of experience = AA/AS

ATTACHMENT 5

INVOICE PREPARATION INSTRUCTIONS

INVOICE PREPARATION INSTRUCTIONS
SF 1034

The information which a contractor is required to submit in its Standard Form 1034 is set forth as follows:

(1) **U.S. Department, Bureau, or establishment and location** - insert the names and address of the servicing finance office unless the contract specifically provides otherwise.

(2) **Date Voucher Prepared** - insert date on which the public voucher is prepared and submitted.

(3) **Contract/Delivery Order Number and Date** - insert the number and date of the Contract and delivery order, if applicable, under which reimbursement is claimed.

(4) **Requisition Number and Date** - leave blank.

(5) **Voucher Number** - insert the appropriate serial number of the voucher. A separate series of consecutive numbers, beginning with Number 1, shall be used by the Contractor for each new contract. When an original voucher was submitted, but not paid in full because of suspended costs, resubmission vouchers should be submitted in a separate invoice showing the original voucher number and designated with the letter "R" as the last character of the number. If there is more than one resubmission, use the appropriate suffix (R2, R3, etc.)

(6) **Schedule Number; Paid By; Date Invoice Received** - leave blank.

(7) **Discount Terms** - enter terms of discount, if applicable.

(8) **Payee's Account Number** - this space may be used by the Contractor to record the account or job number(s) assigned to the contract or may be left blank.

(9) **Payee's Name and Address** - show the name of the Contractor exactly as it appears in the contract and its correct address, except when an assignment has been made by the Contractor, or the right to receive payment has been restricted, as in the case of an advance account. When the right to receive payment is restricted, the type of information to be shown in this space shall be furnished by the Contracting Officer.

(10) **Shipped From; To; Weight Government B/L Number** - insert for supply contracts.

(11) **Date of Delivery or Service** - show the month, day and year, beginning and ending dates of incurrence of costs claimed for reimbursement. Adjustments to costs for

prior periods should identify the period applicable to their incurrence, e.g., revised provisional or final indirect cost rates, award fee, etc.

Articles and Services - insert the following: "For detail, see Standard Form 1035 total amount claimed transferred from Page of Standard Form 1035." Type "COST REIMBURSABLE-PROVISIONAL PAYMENT" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-PROVISIONAL PAYMENT" on the Interim public vouchers. Type "COST REIMBURSABLE-COMPLETION VOUCHER" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-COMPLETION VOUCHER" on the Completion public voucher. Type "COST REIMBURSABLE-FINAL VOUCHER" or "INDEFINITE QUANTITY/INDEFINITE DELIVERY-FINAL VOUCHER" on the Final public voucher.

Type the following certification, signed by an authorized official, on the face of the Standard Form 1034.

"I certify that all payments requested are for appropriate purposes and in accordance with the agreements set forth in the contract."

_____ _____

(Name of Official) (Title)

(12) **Quantity; Unit Price** - insert for supply contracts.

(13) **Amount** - insert the amount claimed for the period indicated in (11) above.

ATTACHMENT 10

Property Management Plan

Property Management Plan dated October 2014 located in the EPA
CASTNET QAPP Revision 8.2 dated October 2014

ATTACHMENT 11

Service Contract Act (SCA) Wage Determination
Not Applicable Per Exemption Under FAR 52.204.8 Annual Representations and Certifications

ATTACHMENT 12

Ordering Instructions

(a) The CO will initiate a new task order by submitting a request for a task order technical proposal and cost estimate to the Contractor via email. The request will include: the task order statement of work (SOW), attachments or supplemental information (if any), task order terms and conditions (if any), wage determination (if applicable), submission instructions, and the due date for the task order proposal. Requesting a task order proposal does not commit the Government to awarding a task order.

(b) The Contractor shall submit a task order technical proposal and cost estimate within ten (10) calendar days and in accordance with the submission instructions. Longer proposal preparation times are solely at the Government's discretion. Preparation of proposals and proposal revisions are not direct charges to this contract. The Government will evaluate the task order proposal and cost estimate received. The Government may negotiate and/or request revisions to the task order proposal if deemed necessary. Once the Government has accepted the task order proposal and cost estimate, the CO will issue a task order by sending a funded (fully or incrementally funded) task order on Optional Form 347 with the task order SOW and if applicable, task order specific terms and conditions to the Contractor. The Contractor shall acknowledge receipt of each task order request to the CO within two (2) business days of receipt. The Government reserves the right to accept parts of an acceptable proposal in order to commence work activities on those definitized/accepted areas while negotiations are conducted to reach agreement on the unacceptable areas of the proposal.

(c) For purpose of this contract, proposal staffing plan stated under the Ordering—By Designated Ordering Officers clause shall mean a technical proposal and cost estimate and estimated labor hours mentioned under the same clause will not be provided by the Government to the Contractor.

(d) Task Orders may include their own special terms and conditions including clauses to which the contractor shall adhere. Task orders may include optional periods and/or optional quantities with the applicable clauses to be incorporated. All special terms and conditions will be included in the CO's request for task order proposal and in the awarded task order. The proposal shall indicate the Contractor's acceptance of the task order level terms and conditions.

(e) Task orders may be placed at any point during the ordering period of the contract. Individual orders will have unique periods of performance which may include optional periods. No task order may have a period of performance that goes longer than expiration of the contract or as authorized under the Indefinite Quantity clause in Section I of this contract.

(f) Task Orders will be requested and awarded as a time-and-materials (T&M) order with ceiling price which the Contractor is not authorized to exceed and the Contractor exceeds at its own risk.

(g) Electronic and verbal ordering by an EPA Contracting Officer is authorized under this contract as well as methods mentioned under FAR 52.216-18 Ordering clause.

(h) The Contractor is permitted to propose discounts off the Schedule rates which are exclusive and binding to the task order.

(j) The Contractor shall submit all analyses, options, recommendations, reports and training materials required under these task orders in draft for critical review by the Contracting Officer or the Contracting Officer's Representative (COR). The Government will make all final regulatory, policy, and interpretive decisions resulting from contractor-provided technical support under this contract and make the final decision on all contractor-provided recommendations. The contractor shall not publish or otherwise release, distribute, or disclose any work product generated under this contract without obtaining EPA's express written approval.